MEN WHO PLAYED THE GAME

ARCHER WALLACE



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by

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MEN WHO PLAYED THE GAME

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ARCHER WALLACE

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HEROES, PAST AND PRESENT*

Nearly twenty-five centuries ago Leonidas, King of Sparta, with only three hundred soldiers, held the pass at Thermopylae against the Persian hordes. Leonidas and his men were massacred, but the heroic stand they made against overwhelming odds will never be forgotten. "Their name liveth forevermore."

* * * * * * *

About forty years ago, there was a sad disaster in the Mauricewood Pit in Scotland when sixty-eight men and boys lost their lives. Three boys — who were pony drivers — might have saved their lives but they turned back, at great risk, into the mine to warn others, and as a result they, too, perished. The heart of all Scotland was moved by the courage and sacrifice of these boys and a writer pictured a meeting between the three Scottish boys and the heroes of Thermopylae:

"Three hundred men
From the Grecian glen,
All clad in shining brass,
Were standing by
With Spartan eye
To see three laddies pass."

*This illustration is taken from "Stories Twice Told," by Rev. G. P. Struthers of Greenock, Scotland.

So it is true that every age has its heroes even though they do not show courage in the same way. This book tells of fourteen heroic men who belong to the same class as those of Thermopylae and Maurice wood. One man written about here invented a system whereby the blind could read; another discovered X-Rays which have become a great help to surgeons. Here is the story of Wilberforce who devoted his entire life to free men from brutal slavery, while another chapter tells of a Japanese whose life has been a blessing to thousands. Fortunately, nowadays, people understand that men and women — and boys and girls — can be heroes, no matter where they live or what their circumstances in life may be.

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CHAPTER I

ONE CROWDED HOUR OF GLORIOUS LIFE

PHILIP SIDNEY was born in November, 1554, in an old manor house named Penshurst which stood in a lonely Kentish garden. His father, Sir Henry Sidney, belonged to one of the leading English families and just a short time before Philip's birth King Edward VI had died in his arms. In an age, when wars were frequent and life and property held lightly, it was said that the honour of Henry Sidney was never corrupted.

Young Philip Sidney was born into a sad household. His grandfather and uncle had been beheaded for treason and his gentle mother recently stricken with smallpox, a most loathsome disease which medical skill had not been able to relieve. She retired to hide her poor scarred face in the seclusion of Penshurst. Owing to the bitter feuds of that day, and the unsettled condition of the country, Philip's father was absent from home most of the time and so the ruddy-haired lad was his mother's companion in the lonely, spacious, old English home.

When he was eleven years of age Philip was sent to Shrewsbury School, on the borders of

Wales. He was an unusually attractive boy in every way and won the respect of pupils and teachers alike. One who was a school chum wrote of him, many years afterwards: "Though I lived with Philip Sidney and knew him from a child yet I never knew him other than a man with such steadiness of mind, lovely and familiar gravity, as carried grace and reverence above his years. Even his teachers found something in him that they could observe and learn above which they had read or taught." So apt was he at his lessons that he was able to write to his father in French and Latin when he was eleven. His tutor, Thomas Thornton, was proud of having been his teacher and previous to his death, he left instructions that on his tombstone, the fact that he had taught Philip Sidney, should be inscribed.

Philip went to Christ Church, Oxford, in 1568, where he remained until 1572. Afterwards he travelled in France, Germany, Italy and many other countries, gaining much knowledge and preparing himself for what he earnestly hoped would be a life of great usefulness. He was in Paris on that fateful night, August 24, 1572, when the terrible massacre of St. Bartholomew took place. Happily he found shelter in the house of Sir Francis Walsingham, English ambassador in Paris, and thus escaped being a victim of religious

He returned to England in 1575 after a very interesting and adventurous three years in Europe. Queen Elizabeth was then living in great splendour and Philip became attached to her court. He was now twenty-one years of age, handsome in appearance and one of the foremost scholars in England. Even in that court of regal dignity and pomp, crowded with fascinating men and women, Philip Sidney attracted much attention. The Queen sent him on a special mission to Austria from which he returned in 1577, having acquitted himself with distinction.

It was an age of prosperity for England and a time of such mad extravagance and luxury that Queen Elizabeth — who died the owner of three thousand dresses — issued a solemn proclamation against extravagance in dress.

It would not have been surprising if young Philip had caught the prevailing spirit and given himself up to idleness and frivolous living. Writing of him, George William Curtis said: "Great good fortune is the most searching test of character. If a man have fine friends, fine family, fine talents and prospects, they are very likely to be the sirens in whose sweet singing he forgets everything, but the pleasure of listening to it. Let us imagine ourselves in Philip Sidney's place. If we had come of famous ancestry — if our father were vice-regal governor — if the sovereign's

favourite were our uncle who intended us for his heir — if marriage had been proposed with the beautiful daughter of the prime minister — and if we were young, handsome and accomplished — and all this were more than three hundred years before the rights of men and the dignity of labour were even discussed ... we should probably have developed extreme bumptiousness and conceit."

It is to Philip Sidney's credit that he remained a kind and simple-hearted young man; free from vanity and ever courteous to the humblest and less fortunate. But, though gentle, he was courageous and he wrote a letter to Queen Elizabeth protesting against her proposed marriage with King Philip of Spain. This letter annoyed the Queen and he was for a time banished from her court. He retired to Penshurst. He was content to watch events and was extremely happy that the contemplated marriage did not take place.

He spent his days at Penshurst in the company of his lovely sister and devoted his time to literary work. He wrote his famous long poem *Arcadia*, one of the really great poems of that age. This he followed with the *Defence of Poesy*, and other works which caused critics to refer to him as "the first good prose writer."

But Philip Sidney was too active to thoroughly enjoy leisure and soon he was again seen at the Queen's court. In 1583 he married Frances

the daughter of Sir Francis Walsingham, with whom he lived happily until his death. War between England and Spain seemed inevitable. The Spanish King, annoyed and chagrined because his proposal of marriage to the Queen of England had been refused, was determined to humble Elizabeth and her country. Philip Sidney was anxious to join Francis Drake in his proposed attack upon the Spanish Armada. He hurried to Plymouth and was about to embark, but at the last moment a peer of the realm arrived from the Queen forbidding his departure. Philip bowed and obeyed.

Two months afterwards Queen Elizabeth appointed Philip Governor of Flushing in the Netherlands, at that time the scene of bitter conflict between the English and Spanish. In the misty dawn of morning on September 22, 1586, over four thousand Spaniards stole silently to attack Zutphen on the river Isel. Philip went forth at the head of five hundred men to meet them. When the fog lifted the disparity in numbers was seen by both sides. The battle was sharp and confused. Sidney saw a friend, Lord Willoughby, in special danger and went to rescue him. His horse was shot under him. He sprang upon another, dashed forward and saved his friend, but at that instant a musket-ball from the trenches struck him above the left knee and shattered the bone in pieces. His

horse became unmanageable and he was obliged to leave the field.

Fulke Greville, who had been a boy with Philip at school, was present and saw what happened. Here is his account of it, written soon afterwards: "The horse Philip rode was rather furiously choleric than bravely proud, and so forced him to forsake the field. In which sad progress Philip, passing along by the rest of the army, where his uncle the general was, and being thirsty with excess of bleeding, called for a drink which was presently brought him; but as he was putting the bottle to his mouth, he saw a poor soldier carried along, who had eaten his last at the same feast, ghastly casting up his eyes at the bottle, which Sir Philip perceiving, took it from his lips before he drank, and delivered it to the poor man with these words — *Thy necessity is greater than mine.* And when he had pledged thus this poor soldier he was carried to Arnheim."

He lingered in much suffering at Arnheim for twenty-six days. His distressed wife joined him, tenderly watching over him and solacing his hours of suffering with music. He bore the pain with uncomplaining fortitude and his chief concern was to buoy up the spirits of those around him. Hopes were entertained for his recovery but Philip was not deceived. He knew he could not recover and expressed gratitude to God that he had time

to prepare himself for death and put his worldly affairs in order. Quietly he gave instructions about his property, not forgetting anyone, and his concern for the welfare of others — which had always been the most noticeable quality in his character — was never more in evidence than in his dying hours. He passed away between the hours of two and three o'clock in the afternoon of October 17, 1586. He bade his friends farewell with these words: "Love my memory, cherish my friends; their faith to me may assure you they are honest. But above all govern your will and affections by the will and word of your Creator; in me beholding the end of this world, with all her vanities."

The announcement of his death did not reach England for more than two weeks and the news was received by all classes as a great national calamity. Such was the sorrow of the nation that for many long months it was considered almost a sin for any gentleman to appear at Court or City in any light or gaudy apparel. By order of the Queen he was buried in St. Paul's Cathedral amid the deep sorrow of all the people.

Philip Sidney was not by temperament a fighting man. Instinctively he loved all men. He was gentle and sympathetic; one of the most gracious and unselfish men who ever lived. But he lived in a warlike age when a death upon

the battlefield seemed the most heroic death of all. It was said that, for generations after he died, men were proud to be called Englishmen because Philip Sidney had been an Englishman.

William Camden, who had been a fellow student of Philip's at Oxford, and who became the greatest antiquarian of his age, paid this fitting tribute to Philip's memory: "Rest thee in peace, Sidney, (if I may be allowed this address). We will not celebrate your death with tears but with admiration. Whatever we loved in you, whatever we admired in you still continues and will continue in the memories of men, the revolutions of ages and the annals of time. Many, as inglorious and ignoble, are buried in oblivion, but Sidney shall live to all posterity. For as the Grecian poet has it, 'Virtue is beyond the reach of fate'."

CHAPTER II

THE MAN WHO DISCOVERED X-RAYS

ON one memorable Friday evening — to be exact — November 8, 1895, a solitary worker was in his laboratory at Würzburg University in Germany, toiling with all the concentration of genius, as he had done scores of times previously. Professor Wilhelm Conrad Roentgen, for that was the man's name, was a tall, slender, loose-limbed man who threw himself heart and soul into everything he attempted to do.

The laboratory was furnished with simple and inexpensive apparatus. It was about twenty feet by fifteen. In the centre was a stove, on one side was a small cabinet whose shelves held whatever instruments the Professor needed; a small table and one or two chairs completed the furnishings. Doctor Roentgen worked eagerly as one who is on the verge of a great discovery. He was indeed on the verge of a discovery, one of the most important in the history of the human race, the effect of which was to reach out to every corner of the earth and to bring hope and healing to millions of sufferers.

Previously that evening, Roentgen had been reading a book. When he closed it he left a peculiarly shaped key to serve as a book-mark. In a moment of absentmindedness he laid an active electric tube — known as a Crookes tube — on the book. The book itself was resting on a photographic plate which had been used earlier in the day but had not been developed. When it was developed Roentgen discovered on the plate, not only the picture he had taken, but the shadow of the key which he had used as a book-mark. He was greatly perplexed by this and the next day he discussed the matter with students in his class but no one could think of an explanation.

Roentgen was completely baffled but he determined to solve the mystery. On the evening already mentioned — November 8, 1895, he arranged everything in his laboratory as it had been on the previous evening. He placed every object in the precise position it had been before; an exposed plate holder, the book with the key in the centre, and the active Crookes tube resting on the book. Roentgen was a born thinker and searcher and he had often been greatly stirred over investigations but never before had he been so excited. Would the shadow of the key again be seen when he developed the plate?

He could hardly wait, as with quick nervous movements, he developed the photographic plate.

Yes! once again there was the shadowy outline of the key. The rays from the tube had penetrated the thick pages of the book and caused the outline of the key again to appear on a photographic plate. If rays could penetrate the pages of a book then why not other substances? Metals for instance could be examined in this way and flaws detected but — and this was the thought which made Roentgen tremble with excitement — why could not these mysterious rays penetrate the human body so that foreign substances could be located and removed? This is exactly what has happened and to-day these mysterious rays are used to photograph the skeleton and all the internal organs of the human body as an aid in diagnosis. Previous to that memorable night sufferers had to locate pains as well as they could and more often than not physicians would hesitate and be uncertain as to the actual condition of the patient. That dangerous uncertainty has been removed. The doctor no longer has to guess. He makes an X-ray examination and the condition is seen with startling clearness.

For nearly two months after his discovery Roentgen made no announcement but worked with untiring energy, making numerous tests and trying to find out just what penetrative power the rays had. Then on December 28, 1895, he announced that he would read a paper before the

Physico-medical Society at Würzburg. Modestly and quietly he announced to these astonished scientists that he had discovered rays which could penetrate solid substances; that with these rays every organ of the body could be photographed and the workings of inner organs made perfectly clear.

His hearers gasped with astonishment, then he invited the oldest member of the group, a famous scientist named Doctor Von Killiker, to place his hand behind the screen. One who was present writes: "Never will the thrill of that first glimpse of the living human skeleton be forgotten." This was the climax of the lecture and a practical proof of what these new rays could do. The applause which followed was prolonged and within a few days news of Roentgen's discovery had been flashed everywhere and he took his place among the most famous men of science. Since the exact nature of the rays was unknown Roentgen named them X-rays (meaning, unknown quantity) and by that name they have been known ever since.

Wilhelm Conrad Roentgen was born in the little town of Lennep in Germany on March 27, 1845. His father was a Prussian farmer in moderate circumstances and his mother was a native of Utrecht in Holland. Roentgen was an only child and as a boy was modest and reserved. Modesty, in fact, was always a most noticeable

thing about him, so much so, that after his famous discovery he could never understand why all the world was interested in him. Probably this is the reason why so little is known of his boyhood for he constantly refused to talk about himself.

His father wished him to become a farmer and sent him to the agricultural school at Apeldoorn, a charming little town in Holland. Then something happened, trivial in itself, which changed the course of the boy's life and had far-reaching consequences such as no one ever dreamed of. Some of the boys in the school indulged in a prank which greatly annoyed the authorities. Roentgen was accused of taking part in it and he pleaded guilty but absolutely refused to divulge the names of the other boys who were with him. He was told that unless he did so he would be dismissed from the school in disgrace. The threat found him unmoved and he was sent home to his parents. Thus the world lost a farmer, and gained a scientist — the discoverer of X-rays.

He was at a loss, now, to know what he should do. He did not have matriculation and was thus barred from most universities. Someone told him that the Polytechnical Institute at Zurich in Switzerland was open to students of promise without this test. He entered this school and began to study science. From this school he was graduated as Doctor of Philosophy in 1869, when

he was twenty-four years of age. Soon afterwards he received an appointment as Associate Professor of Physics at Strassburg University.

Some years afterwards, in 1888, he was made Professor of Experimental Physics at Würzburg University. He was given the position there only after a good deal of hesitation for it was known that he had studied at a small university because he did not have matriculation standing. How little did the authorities know that this man would some day bring more fame and attract more attention to their university than all the other teachers there put together! It was here, seven years later, that Roentgen made his famous discovery.

X-rays have been named the world's greatest detective agency. No human eye, unaided, can see through steel and wood and human flesh; all of these are easily penetrated by the rays. Indeed, so powerful have recent X-rays now become that they can search into the heart of steel objects *fifteen inches thick*, and there are only a few of the densest metals that so far have not been penetrated by them.

X-rays have been used to test the materials used in building railroads. Some railway companies insist that every rail and nut and bolt in their construction shall be examined by the rays for possible defects, and if some defect is

discovered every bit of steel from the same source is examined. Thus the danger of serious disaster is greatly reduced and in that way alone X-rays have probably been the means of saving hundreds of lives.

In dozens of other ways Roentgen's discovery has been found most valuable but its greatest service has been rendered in the field of medicine and surgery. Because he is able to take pictures of the patient's interior organs the surgeon has an unerring guide as he proceeds in his work of performing operations. It is safe to say that there is not a decently-equipped hospital in the whole world without its X-ray department and the ever-increasing accuracy with which surgeons can operate is very largely due to the assistance afforded by X-ray examinations.

It is not surprising that great honours came to Roentgen during the late years of his life. Governments one after another decorated him and great universities conferred degrees upon him. Great cities named boulevards after him and his laboratory became a Roentgen museum. He had the rare distinction of having a striking monument erected to him during his lifetime. It stands at the approach to the Potsdam bridge in Berlin. In 1901 he was awarded the first of the Nobel prizes for Physics, "in recognition of the exceptional services rendered by him in the discovery of

the special rays which have been named after him." Indeed what a biographer, Mr. Percy Ghent, says is true: "Laurels came to him from the ends of the earth."

He remained unspoiled throughout it all. He continued to live a simple life at Würzburg, faithful to his students, and declined flattering offers to go to positions in Berlin and other places, with very large salaries. His generosity was one of the marks of his greatness; money had little attraction for him, he was devoted to science and to the service of others.

The large sum of money he received with the Nobel prize he donated to a society in his native land for the encouragement of scientific research. Never once was he known to have shown any desire to become rich and he persistently refused to profit financially from his discovery. He was grateful that he had been the means of increasing human happiness and he wished to present his revelation — free — to all humanity.

Roentgen lived to be almost seventy-eight years of age. He died at a village suburb of Munich on February 10, 1923. "He blessed the world with an imperishable boon, and his name liveth for evermore. Monuments of stone and bronze commemorate his worth, but the greatest of all memorials are the countless thankful hearts whose sufferings have been made lighter by the

ministrations his discovery made possible. Without hesitation Roentgen may be classed as one of the greatest and noblest figures of his generation."

He was a modest, lovable man; painstaking and thorough in all he did; kind, courteous and tolerant towards everybody, and his life is an inspiration and a challenge to all who would do good.

CHAPTER III

A JAPANESE APOSTLE OF LOVE

ONE of the most remarkable men in the world is Toyohiko Kagawa who was born at Kobe, in Japan, on July 10, 1888. His father died when Toyohiko was very young but a wealthy uncle took the fatherless boy and sent him to the best schools, so that he had every educational advantage. At the age of nine he went to a Buddhist temple where he studied the teachings of Confucius. He was very anxious to study the English language, and he joined the Bible class of a Christian missionary from the United States named Dr. Harry Myers.

Although his chief purpose in joining the Bible class was to learn the English language, Toyohiko Kagawa became greatly interested in the teachings of Jesus and was converted to Christianity. His uncle, who was the richest man in the province of Awa, had intended making the boy his heir but when his nephew became a Christian, he promptly disinherited Toyohiko and refused to have anything more to do with him.

Young Kagawa threw himself heart and soul into the work of the church and Sunday School. He was penniless and now homeless, but Dr. Myers took him into his own home and later the boy entered the Presbyterian theological seminary at Tokyo, resolved to become a Christian minister. He was not strong, indeed his poor health was a constant source of anxiety to his friends. This anxiety was increased when they found that after his return to Kobe, Toyohiko spent a good deal of his time teaching and preaching in Shinkawa, one of the worst slum districts of Kobe.

The sorrow and misery of the poor lay heavily upon the soul of young Kagawa. There were about eleven thousand people living in the Shinkawa district; they were huddled together in tiny hovels and often he found as many as nine people sleeping in a room six feet square. From the time of his conversion the wretched condition of these unfortunate people touched the soul of Kagawa and his heart went out to them with great tenderness. About this time his health was so poor that he was forced to spend a year in the fishing-village of Gamagori, where he rented a tiny cottage for fifty cents (two rupees) a month. Here, again his love for the poor showed itself. "He wrote letters for those who were unable to write, painted their names on their oiled paper

umbrellas, smoothed out their family quarrels, and was big brother to all the children in the village."

Although still threatened with tuberculosis, he again went to live in Shinkawa. His activity was astonishing. He often preached to labourers at the water-front at five o'clock in the morning and again he was there to teach and preach in the evening. He visited the poor and unfortunate; nursed the sick and even assisted in burying the dead. Often he gave away his own food and such clothing as he could spare and lived on so little money that his friends feared that his health would break.

He tried every plan he could think of to help the people of the slums. He did not scold them for their habits of living; his heart ached for them for he understood how the crushing burden of poverty lay upon their unhappy lives. He opened night schools, began sewing classes, a brush factory, cheap eating-houses, a lodging-house and a dozen other enterprises which he thought would relieve distress and bring happiness into the lives of the people. With it all he never ceased to preach the love of God as revealed in Jesus Christ.

After nearly five years spent in the slums of Kobe he went to the United States to study at Princeton College where he remained for three years. When he returned to Kobe from the United States Kagawa astonished his friends by

returning at once to the slums — indeed he spent his first night in Japan in Shinkawa. Travel and education abroad had not changed him, the only difference — if any — was that he returned a little better equipped and more determined than ever to live and preach his gospel of love to all mankind. From that day until the present he has not only preached, but actually lived, the Gospel of Jesus Christ as he understands it.

During his illness at Gamagori, and later when engaged in slum work, he wrote several books which had a surprisingly large sale. The income from the sale of these books enabled him to carry out many plans which he had long cherished. Even when he was no longer poor, he felt it to be his duty to live very simply. For many years he had but one suit of clothes and very scanty covering for his bed. If friends gave him more clothing, he promptly gave it to the needy. When one remembers his great gifts as a speaker and writer and also his ceaseless labours for the poor it is not surprising that Kagawa soon became one of the best-loved and most talked-of men in Japan.

Kagawa has always been very much opposed to war as a means of settling disputes. His keen mind and his loving heart convinced him that wars did not really settle anything but left feelings of hate and bitterness in the hearts both of victors

and vanquished and, although he lost many friends even in the Christian church itself, he has never ceased to oppose violence. He is opposed to militarism; his only weapon is the gospel of love.

In spite of very poor health he is one of the happiest men alive. He meets difficulties and opposition with a smile and refuses to be downhearted. He has seen life at its ugliest, where surroundings are terribly depressing and where men and women, and even children, are sad. Kagawa believes that the gospel of love alone can remedy these conditions and because that faith is so strong in his soul he refuses to be discouraged.

At present (1931) he is pastor of three churches; one each in the settlements of Tokyo, Psaka and Kobe. In a speech he delivered to Christian leaders in Shanghai he said: "When preaching in the slums I have tried to do these things: First to help the needy, the physically weak, and wounded. In order to do this I opened a free clinic. Second, to educate slum boys. I began to teach arithmetic and algebra for two hours in the morning beginning at five o'clock, and again from seven to eight o'clock, after the classes, I go out with the students for street preaching. For the first four years of my residence in the slums I never ceased street preaching."

The energy of Kagawa is amazing. After the

earthquake of Tokyo in 1923 he organized all manner of relief work for the afflicted; he also established a baby clinic and arranged for the distribution of milk.

Meanwhile the success of Kagawa's books made it possible for him to finance his work in the slums. One book that he wrote in the fishing village of Gamagori: *Crossing The Death line* — a book which was partly the story of his own life — took the world by storm. Over 150,000 copies were sold in the first few weeks. All the money hat came from the sale of these books Kagawa ɔut into his settlement work. He had become famous in a few months but he continued to live in the slums, to wear the clothes of the working-class, to eat their food and to enter kindly into their lives and live as one of themselves.

He continued to write books showing how terrible were the slums of great Japanese cities as he knew from actual experience. The facts he presented caused such a wave of sympathy for the poor, living their drab and sordid lives, that the leaders of the government felt they must do something. The sum of ten million dollars was set apart for slum reclamation in the six largest cities of Japan — Kobe, Osaka, Tokyo, Kyoto, Yokohama and Nagoya. These changes began in 1928 and were to be completed in 1933. And so the Japanese government, that had thrown Kagawa

into prison some years previously because of his views, was glad to accept his ideas and to carry them out.

In order the better to assist the struggling masses of Japan, Kagawa visited Great Britain, Germany, Holland and the United States, always observing whatever was likely to enable him to help his helpless people.

The longer Kagawa lived in the slums the more he realized that much of the misery and also the immorality of the people was caused by circumstances over which they had little control. Hence he helped to organize labour union movements which he believed would greatly improve conditions and help to make the unfortunate people happier and better in every way. For his part in doing this he was shadowed by detectives because the government did not understand his motives. Eventually he was fined and imprisoned and yet, after his release the attitude of the authorities so changed towards Kagawa that he was appointed a member of the Imperial Economic Commission of which the Premier was chairman.

In appearance Kagawa is short of stature and dresses in the ordinary garb of a working man. He contracted a disease of the eyes from a man with whom he shared his bed, and ever since his eyes have been weak and painful. Sometimes he has suffered the complete loss of sight. He

always carries in his pocket a small lens which he places to his eye when he wishes to read. His weight does not exceed one hundred and ten pounds, and all his life he has been threatened with tuberculosis. Yet this little man is one of the most impressive and effective speakers in the world and his influence for good has gone out to every corner of the earth.

Just think of this little Japanese, suffering from poor health, turned adrift by his relatives, yet loving all mankind and giving his life to help and bless others. Here are a few sentences taken from his books:

"Love alone can subdue the world. All those men who dreamed of world empire have failed: the first Emperor of China, Alexander the Great, Hannibal, Julius Cæsar, Napoleon Bonaparte, the Kaiser — all have failed and vanished like a dream. Conquest by the sword is but for the moment; it has no validity whatever.

"I stand against all learning, all institutions, all governments, all arts, all religions which reject love. I protest against every Church which preaches faith and fails to love. I oppose the politicians who rely on force and know nothing about love. If I have to be arrested for saying this, let me be handcuffed, for I would rather die quickly by the sword than die of thirst in a loveless desert.

"Love introduces God to me. Love is my sanctuary — in factory, field, or city street; in bedroom, office, kitchen or sick room. I have my sanctuary everywhere I go in the universe. Where love is there God is."

Probably there is no man living who can sing Faber's beautiful hymn more heartily than Toyohiko Kagawa:

There's a wideness in God's mercy,
Like the wideness of the sea;
There's a kindness in His justice,
Which is more than liberty.

For the love of God is broader
Than the measure of man's mind;
And the heart of the Eternal
Is most wonderfully kind.

CHAPTER IV

A PIONEER OF GOODWILL

A CROWDED train was speeding westward across the American continent. The day was hot, the car ill-ventilated and the passengers, who were mostly of foreign birth, became fretful and restless. At one station a woman and a five-year-old girl got in. The child had toothache and was crying bitterly. Now crying is infectious and soon there were half a dozen children in that car crying loudly enough to set the already distracted passengers' nerves on edge.

The mother of the five-year-old girl tried to comfort her by saying that they would soon be at the dentist's and he would extract the naughty tooth. Instead of producing the desired effect that remark caused the little girl to scream louder than ever. Then two babies joined the chorus, bringing the vocal number up to nine. The mother, who was evidently a foolish woman, said: "Jenny, if you don't stop crying, I'll break your neck!" Jenny, more terrified than ever, ran down the aisle of the car.

She stopped at a seat where a man, with kind-

ness written on every feature of his face, was sitting. "Tell me, Jenny," he said, "where does the tooth hurt?" She pointed to her swollen cheek. "I'll soon take that toothache away," he said, gently taking the little girl upon his knee, and stroking her cheek. After a while, he asked, "Does it still ache, Jenny?" "Not now, but do it some more," she asked. Soon the child fell asleep and the man carried her to her mother's arms.

The mothers of other crying babies looked at the man expectantly. He accepted the challenge. He took a tiny Lithuanian baby and after he nursed it awhile, and gave it a drink, the babe relaxed and fell asleep. His next attempt was with an Italian baby and that infant — from the land of Caruso — shrieked so loudly that he thought he was going to be defeated and lose his reputation as a soothing syrup. However, patience conquered, and at last young Italy's cries were changed to a low crooning and then sleep came.

When the car was quiet and everybody feeling happier a lady approached this man and said: "Pardon me, sir, but are you an M. D.?" "No, madam," he answered, "I am an L. L. B." The lady looked puzzled. "I never heard of that degree," she said. "What does L. L. B. mean?" "Lover of Little Babies," he replied.

The man's name is Edward A. Steiner. He was born of Jewish parents in Vienna, Austria, in

1866. He was very young when his father died and he and his widowed mother moved to a village not far from the city. Most of the natives of the village were Slovaks and they were poor, stupid but kind-hearted. The Magyars, who ruled over them, were hard and cruel. The Slovaks were cruelly whipped in public and cast into prison for the slightest wrong-doing. Insults and brutality were their daily lot, and they were afraid even to protest, for their lives were held cheaply. Although not a Slovak, Edward Steiner felt sorry for them and earnestly wished that he could deliver them from their oppressors.

Later, he attended the University of Heidelberg and during the summer vacations he often set out, sometimes on foot or on his bicycle, to explore the surrounding countryside. On one of these trips he visited Count Tolstoi in his Russian home and was greatly impressed by the gentleness and simplicity of that great man. But whenever he returned home, Edward pitied the wretched condition of the Slovaks and moreover, he spoke his thoughts. One day, a man told Edward's mother that her son was in danger of falling into the hands of the government and being severely punished. The man spoke the truth, for Edward's sentiments had been made known to the authorities. He decided to flee from the country and so, within a few days, he was in the steerage of a big ship bound for America.

The voyage was long and the weather rough. His bunk was little more than a shelf in a dark corner of the ship. He was not used to such foul air and coarse food. Altogether, Edward Steiner did not enjoy the journey and often longed for home. When at last he did arrive in New York he realized what a tremendous handicap it is to arrive in a country without a knowledge of the language and of the customs of the people.

He bought his first banana and tried to eat it with the skin on. He decided that bananas were tough and he didn't like them. He went to a cheap boarding-house and sat down at the table expecting to be served. He got little to eat and a big German was evidently sorry for him and said: "Young man, you must remember that in this country, God helps those who help themselves." Soon Edward began to learn the language and a great many other things besides.

Later he wrote: "I knew I was in a free country, but the only thing which was free — and this made no impression upon me — was ice water. I helped myself to it but the more I drank the hungrier I grew ... my first impressions of the United States were that ice water was free; there were no soldiers in the streets; policemen were scarce; a saloon was a drinking-place — and there were many of them in those days; that bananas might be relished by Americans but that to a

European they were tough on the outside and mushy within and that, above everything else, it was a country where God helps those who help themselves."

He was very homesick. When he left home his mother had given him the address of some relatives who lived in New York and he decided to visit them. He found them, after considerable difficulty, and they received him very kindly, and for the first time since his arrival, his spirits rose. A good supper was spread before him but he was so exhausted that he fell asleep at the table while his relatives were asking questions about the Old Country. His friends loaned him a little money and gave him so much advice that, although he was grateful, he was almost dizzy trying to remember it all.

His first job was with a cloakmaker, an Austrian Jew, who provided him with a flatiron and showed him how to press clothes. He had never done it before, but he was willing and anxious to succeed. For a while he did fairly well but in the afternoon he scorched one of the cloaks, and the forewoman — who was a red-headed Irish woman — gave him a piece of her mind. He didn't understand a word she was saying, but he knew from the look in her eyes and from the way she shook her fist, that she was not paying him compliments.

He went to his boarding-house that night with blistered hands and an aching body. It seemed to him that he had never been so tired in his life. After supper he tried to remember such expressions of this new country as he could. One by one he went over them: "You bet," "Shut up," "Yes," "No" "boss," "sandwich," "downtown" "uptown" and many others. At the end of the week he received the first money he had ever earned in his life — three dollars and fifty cents. Unfortunately, he soon lost his job and once more he was homeless and hungry.

He got another position, cutting clothing, at seven dollars a week. This job lasted for more than a month and he was able to save enough money to buy some new clothes. He worked hard for ten hours a day, and each evening he attended a night school where he made rapid progress in learning English; soon he was able to speak, and read easily, the language of his adopted country.

It would require a book in itself to tell of the different occupations that Edward Steiner followed during the next three or four years. He worked in a bakery, a sausage factory and a feather-renovating establishment. In each case the wage was small and he just managed to pay his way and nothing more. He heard that opportunities were better further west and he left New York.

One evening he arrived at a little station in

New Jersey. Penniless, lonely and without a place to sleep, he reached a farm where hay was being cut, and asked for employment. He was given work. It was hard and the pay small, but he was glad to get it. The fresh air and wholesome food built up his strength. He slept each night in the hayloft. During the days after haying he ploughed, looked after the cattle, did the odd jobs and made himself generally useful. Several nationalities were represented among the labourers on that farm, and Edward Steiner's interest in immigrants became greater than ever. He came to believe that, although men might seem to be quarrelsome and hot-tempered, yet at heart they were sympathetic and good-natured, quick to respond to kindness. When at last he left the farm he had just ten dollars in his pocket. He fell in with a man who was peddling tin-ware. He deceived Edward Steiner and persuaded him to exchange his ten dollars for the tin-ware. Edward agreed, but later found that he could not sell any of it. So he left it behind and walked to Philadelphia, then on to Pittsburgh.

At Pittsburgh he secured work in a steel mill. His work was to push a hot cauldron of molten metal from a very hot room into another room where the temperature was like the North Pole. Once again he was living in lodgings where

conditions were unsanitary and where there was no privacy, twenty men sharing two living rooms. Many of these men worked seven days a week, and, of course, taking a bath was out of the question. All these experiences of Edward Steiner made him tremendously sympathetic towards the men and women who belonged to the poor working classes, and especially towards those who, like himself, had come as strangers to America. Among them he made scores of true friends.

His fortune changed when he finally became a clerk in a store in an Ohio town. He was allowed to set up a small library at the back of the store. He began to teach European languages and to establish clubs for self-improvement. During the years of his varied experiences he had become a Christian and was resolved to be a minister. He entered Oberlin Theological College and after graduation took charge of a small church.

It is no wonder that Edward Steiner was a success as a minister. His training in college no doubt helped him, but even more was he equipped by the long, and sometimes discouraging experience, through which he had passed. Hard-working people crowded to his church, for they realized how thoroughly he understood them and how deeply he sympathized with them. To him they confided their troubles, and he gladly advised and assisted them.

He wrote many articles for magazines and newspapers, always trying to break down prejudice and to further the cause of goodwill. After several very successful pastorates he was appointed to the position of Professor of Applied Christianity in Grinnel College, Iowa. From that time he was recognized as one of the chief authorities on the subject of immigrants in the United States.

Edward Steiner has made scores of trips across the Atlantic since that first voyage when he was so lonely and homesick. One of his recent journeys was made in the steerage in order to study the needs of newcomers to America and think out ways and means of helping them. He has written several books which have been widely read. Among others are: *Tolstoi the Man, The Immigrant Tide, On the Trail of the Immigrant, From Alien to Citizen* and *The Confessions of a Hyphenated American.*

Above everything else, Edward Steiner is a believer in goodwill among nations and classes and religions. There is bitterness and hate in the world, he says, solely because people do not understand each other. When people get each other's viewpoint there always follows respect, brotherliness and admiration. This is what Edward Steiner believes, and who is there to say he is not right?

CHAPTER V

HE HELPED THE BLIND TO READ

ONE day in the spring of 1812, a three-year-old French child was playing in his father's workshop in the village of Coupvray, near Paris. The father, M. Braille, was a harness-maker and on that particular morning was boring holes with an awl in heavy leather in which he was to set buckles. He left his work for a minute in order to get another tool. Then the little fellow, whose name was Louis, seized the sharp awl and tried to make a hole in the leather. As he bent down, the awl slipped and pierced his eye. For many days the child suffered intense pain and soon the inflammation spread to the other eye, with the result that three-year-old Louis Braille was soon in total darkness and never again saw the light of day.

At that time there were institutions for the blind, although they were not very well-equipped or comfortable places. One of these schools was in Paris and as soon as he was old enough to leave home Louis Braille was sent there. Some time previously another Frenchman named Valentine Hauy, whose heart had been touched by the

unhappy condition of the blind, was standing near a printing machine when he noticed a rough proof just off the press. It suggested to him the idea that the blind might be able to read if very large letters were made to stand out from the paper. Thus in 1784, type for the blind was set on heavily embossed paper.

The attempt, however, could hardly be called successful. It was clumsy and very expensive, and with the exception of parts of the Bible, little else had been made into books for the blind. Few blind persons had learned to read by this method, but young Louis Braille applied himself so earnestly that he not only succeeded in learning the art but was able to teach others. He was appointed a teacher in the school but, when he saw how painfully difficult it was for others to learn the system, he resolved never to cease trying until he had found an easier method. Day and night he worked at the task with amazing patience and skill, and at last he succeeded.

In 1829, when he was only twenty years of age, Louis Braille invented what has been known ever since as the Braille system of reading for the blind. It consists of six raised points, or dots, which the finger tips could recognize quickly so that fingers took the place of eyes. By changing the formation of the dots into many different arrangements, an alphabet was made. Braille

divided the alphabet into groups of ten, the first group being represented by one dot and combinations of two and three dots; the second group by combinations of three and four dots and so on. To count the dots and recognize their peculiar grouping is very difficult for persons with sight. But the blind learn quickly, and it is no exaggeration to say that thousands of blind persons have learned to read quickly and accurately by the Braille system.

Of course it requires many more pages to write a book in Braille than in ordinary print for sighted people; even a short story makes a very large book. For instance, it takes thirteen big books to tell the story of *Dombey and Son* by Charles Dickens. Lamb's *Tales from Shakespeare* has to have a whole shelf of ten bulky volumes when it is set in Braille. The most convenient size for these books is to have paper nine inches by eleven. The Bible in Braille, when complete, occupies several shelves.

The cost of printing in Braille is so expensive that there is still a scarcity of books for the blind. There are practically no private libraries, and public libraries have to be relied upon to furnish them with reading. In most countries these books are loaned to the blind from the government libraries free; even postage is not required, so that

all blind persons are in a position to avail themselves of Louis Braille's marvellous invention.

Do the blind make much use of these books printed in Braille? They certainly do. In one library known to the writer, the average number of volumes taken out each month is over one thousand, of which a large number are taken out by sightless boys. And no wonder, for in this library are to be found the following boys' favourites: *Tom Sawyer, Huckleberry Finn, Westward Ho, Ivanhoe, Robin Hood,* nearly all the novels by Charles Dickens and Rudyard Kipling's *Jungle Book.* There are scores of other prime favourites, and the number is being constantly increased.

Although Braille invented his marvellous system in 1829, it was some time before people realized what a great blessing it was for the sightless. Gradually, however, the glad news spread until to-day there is hardly a country but has its method of printing and distributing books for the blind. In the New York Library alone are over thirteen hundred standard works printed in Braille, while many other cities have libraries almost as large.

The year 1929 was the centenary of Louis Braille's invention, and many glowing tributes in grateful memory of the harness-maker's son came from all over the world. Perhaps the most

were given an opportunity to climb upon the pedestal and, by passing their hands over the statue, gain a good impression of Louis Braille's features. It is no wonder that the onlookers were moved to tears. But the hero-worshippers themselves were very happy, and when they were introduced to a pair of peasants with rough hands — great-grand-nephews of Louis Braille — their satisfaction was complete.

One of the men present on that occasion was L. W. Rodenbert, who represented the blind of America. Here is how he describes what followed that ceremony: "The crowd slowly moved away led by the officials. We followed them around a corner and down a great hill. The rain had ceased, yet water ran babbling in the gutter along the stone roadway down the steep hillside. There was a high old stone wall on the left as we descended, and far down at the bottom of the hill we crossed a quaint old bridge. Just beyond the bridge we came to a little old stone house, perhaps three hundred years old, in which lived a very poor peasant family. Everything seemed stony and uneven about the place, and at one side was a well with a very tall iron pump-handle. Two shy and elderly women stood on the narrow terrace as we came up. One of them, in a tremulous voice, invited us to enter, so we stooped to enter through the very low doorway.

"We observed that the humble house consisted of a single room downstairs, another upstairs and a stone stairway, beneath which was a fireplace. The walls were of rough stone, and the furniture consisted of several stools, a table, a queer old stove and a quaint old cupboard. In one corner was a stone basin built into the wall ... This was the final sanctum of our pilgrimage; we were on holy ground ... In this humble home lived the harness-maker of Coupvray, and on January 4, 1809, his son *Louis Braille was born.*"

It is strange how often good comes out of evil. We can well understand the bitter heartbreak of his parents, as well as his own suffering, when little Louis Braille lost the precious gift of sight. Yet it is certain that no person gifted with sight could have invented the Braille system. So that marvellous invention, which has enabled countless numbers of blind people to triumph over loneliness and misery, was the outcome of an unfortunate accident. Braille became a skilled musician and was organist of a large church in Paris. But the greatest thing he did was to place in the hands of the blind a golden key which opened for them whole worlds of knowledge, usefulness and satisfaction.

CHAPTER VI

THE GOLDEN RULE IN BUSINESS

ARTHUR NASH was born in an Indiana logcabin in 1870. His parents were devoutly religious people belonging to the Seventh Day Adventists. He went to school very little, but he read the New Testament so often that he could repeat many parts of it from memory. He decided that he wanted to be a minister, and to this decision he was helped by this mother whose influence over him was always strong.

There was a training school for Adventist preachers at Battle Creek, to which Arthur Nash was sent. But after some time there, he had a difference of opinion with the authorities and left the college. Later he attended another theological college in Detroit, and again found himself unable to agree with those who taught the Bible. He left that school also and, although he was as determined as ever to be a Christian, he came to the conclusion that he would serve God in some other way than that of the ministry.

For some time he was very unsettled. He tried several jobs and was not happy in any one of them. He was willing and anxious to work —

so much so that he laboured as a hod-carrier to bricklayers, then helped to plaster houses, later worked with construction gangs and for a time was in a broom factory. At last he secured a position as a travelling salesman for a clothing firm in Chicago. His pleasant manner, unfailing courtesy and energy made him more of a success in this business than at any work he had previously tried. He succeeded so well that in a few years' time he was owner of a small clothing factory at Columbus, Ohio. He was doing very well when a disastrous flood in 1913 destroyed the building. This gave his business such a set-back that he left the city and started again in Cincinnati, where he organized the Arthur Nash Clothing Company in 1916.

There were some things about business life that Arthur Nash did not care for. The conditions under which employees worked, the keen competition between rival firms, and many of the common practices of the factories—all these distressed him for he was a man with high ideals, anxious to be honest and fair with everybody. At last he told the members of his family that he would sell his business and take up farming, which he felt sure would be more to his liking. Before he did this something happened which changed his plans completely. The Great War was on, and the owner of a small clothing factory in Cincin-

nati decided to sell out and return to Europe. He offered the concern to Arthur Nash, who bought it in 1918. So his dream of taking up a farm vanished.

The factory that Arthur Nash took over was a typical sweat shop, just like scores and hundreds of others to be found in large cities. The building itself was unsanitary, and the general working conditions were bad for the employees. Hours were long, and wages, especially in some departments, very small. The employees neither received nor expected much consideration. Those who worked in the factory were regarded as so many "hands," and there was little personal contact between employers and employed except for strictly business purposes. These two groups were like men on opposite sides of a high fence, not able to see over it, but throwing bricks at each other. There were thirty-nine employees when Nash took over the factory. It was an "open shop", that is, it had no connection with organized labour.

From the day that he took over the factory Arthur Nash began to improve conditions. He made a point of getting acquainted with each worker and taking a personal interest in him. He was determined to introduce a different spirit into his business, a spirit of goodwill and friendliness that would break down the suspicion and distrust that had existed. Some of the workers, especially

those who had been born in Europe, hardly understood him at first, but soon they responded to his friendliness.

One day Mr. Nash was walking through the factory when he saw an old lady working feverishly, sewing on buttons. Something about her appearance reminded him of his mother, and at once he was deeply touched. He found out that the weekly earnings of the old lady averaged four dollars. He went to her and said: "I don't know how hard your work is. I never tried to sew on buttons, but from now on your wages will be twelve dollars a week."

Of course, having raised the wages of one employee, Arthur Nash had to raise the scale all round. Those who had received twelve dollars a week had their wages raised to eighteen; those previously receiving eighteen to twenty-seven, and so on throughout the factory. Hours of labour were cut down from sixty hours a week to forty-five, and later to forty. Soon the five-day week was established.

Naturally, some of the men who were associated with Arthur Nash in the management of the business predicted that these increased wages and shortened hours would sweep away all profits and ruin the business. Mr. Nash, who was probably still thinking of his farm, replied that he had certain ideals, and if he could not follow them in

his business, then he would give it up. He called all his employees together and told them that he had decided to carry out the principle of the Golden Rule as laid down by Jesus.

Taking up his Bible he read from the Sermon on the Mount these words: "Therefore all things whatsoever ye would that men should do unto you, do ye even so to them; for this is the law and the prophets."

Turning to the astonished work people he said: "As I read that verse I came to the conclusion that true Christianity has never been tried in business; I want to give it a trial in our factory."

Soon afterwards he went to the firm's bookkeeper in order to find out how the profits and losses were comparing under the new arrangement which many even of his friends thought foolish. He was told that the business had more than doubled, and that profits had also greatly increased. He was as much astonished as anyone, but when he walked through the factory he could not fail to see that the workers had caught his spirit and were working as they had never worked before.

"Just see how they are all working!" exclaimed one of the managers. "I never saw men and women put their hearts into their work like that before."

The business grew by leaps and bounds. Within five years the number of employees had increased from thirty-nine to over two thousand, then to three thousand and later, in 1927, to four thousand, making the Arthur Nash Clothing Factory the largest of its kind in all America, if not in the world. The profits increased accordingly, and now Mr. Nash found himself facing a new difficulty. He felt that the spirit of the Golden Rule meant that he should share these increased profits with those whose labours had made them. He called the employees together and discussed the matter fully. It was finally settled, at the express wish of the employees, that the profits should be divided between Mr. Nash and the workers in the factory. The skilled employees insisted that the unskilled workers should receive an increase proportionate with theirs, showing that the spirit of the Golden Rule had taken possession of them all.

In 1921 there was a strike among the garment workers, and the Nash factory was the only one in Cincinnati where the employees refused to strike. But the incident had a peculiar effect upon Mr. Nash: it convinced him that the Trades Union Movement was a good thing for working men and women. He called all the employees together at a theatre in Cincinnati in December 1925, and urged them to join the Amalgamated Clothing Workers of America. To say that the audience

heard him with astonishment is to state the case mildly. Employers and Trade Unionists had so often been in opposition to each other that it seemed the strangest of strange things that Mr. Nash should urge them to join the Union.

At first the employees seemed opposed to the proposal. They had most satisfactory conditions of labour; wages and working conditions were more satisfactory than in any other similar concern. Why not leave well enough alone? A second, then a third meeting had to be called and at last Mr. Nash's advice was accepted and his employees became members of the Amalgamated Clothing Workers of America.

Mr. Nash was anxious to do the right thing, and it was his evident sympathy and sincerity which enabled him to win the confidence even of those who disagreed with him in many matters. The tremendous growth of his business, and the greatly increased number of workers in his factory, made it impossible for him to know each individual as he had done when there were only a few, but he was exceedingly anxious that the spirit of the Golden Rule should be the outstanding thing about his business. He felt that it was not really his business any more than it was that of every individual in the factory. When he addressed them he always began, "fellow-workers," and that was exactly what he meant.

He introduced a new spirit into business. He hoped some day to have the Union take over his business altogether, but he did not live to see his hope realized. He died on October 30, 1927, at the age of fifty-seven. Testimonies to his high character and his unselfish spirit came from all over America. A great labour leader said, "He was one of the most understanding friends in the industry." There is always a temptation to men who are making money to try to make more. The life of Arthur Nash is an example of a man who had a much higher ambition in life than merely to make money. He wanted to share the good things of life with others and to increase the sum total of human happiness.

CHAPTER VII

THE PIONEER OF SUNDAY SCHOOLS

ONE morning in 1780 a man living in Gloucester, England, had occasion to visit a part of the city known as St. Catherine's Meadows, where many very poor people lived. It was a slum district. Although the man, whose name was Robert Raikes, had lived in Gloucester all the forty-five years of his life, he was surprised at the poverty and wretchedness of the district. There were ragged and dirty children everywhere, and Mr. Raikes, who was a great friend of boys and girls, was deeply touched by what he saw.

He was seeking the home of a gardener, and after some difficulty he found it. As he stood on the doorstep talking with the gardener's wife their voices were almost drowned by the yelling, swearing and quarrelling of wretched-looking children. Turning to the woman Robert Raikes asked her if the children lived in those parts. "Yes, sir, they do," she replied, "and if you could see this part of the town on a Sunday you would be shocked indeed. Then the street is filled with children, released on that day from work in the factories. They spend their time in noise and

riot, cursing and swearing in such a horrid manner as to make the place like hell on earth."

Robert Raikes was born in Gloucester on September 14, 1735. His father was editor of the *Gloucester Journal* and when he died in 1757 Robert succeeded him in the editor's chair. From the beginning he used all the influence he had on behalf of the despised, neglected and down-trodden people whose condition was deplorable. At that time people were cast into prison for minor offences. The prisons were filthy, unsanitary dungeons where all classes were herded together, young and old, male and female, first offenders and hardened criminals. Robert Raikes was greatly interested in the subject of prison reform. After he became editor of the Journal he wrote the following description of a prison he had visited: "The prisoners confined in the castle, without allowance and without the means of subsistence by labour, most humbly entreat some little assistance from those who can pity their wretchedness. The favours they have heretofore received will ever be remembered with gratitude."

People were thrown into prison for debt, and men, women and children who were arrested for petty crimes and small debts were herded together with criminals of the deepest dye. Many of them were left there naked, starving and rotting in a truly shocking state.

The children of these unhappy prisoners were left entirely to themselves, and every such neglected home became a breeding-place of vice. These little ones were left to be fed by charity or starve to death. The condition of the prisoners and that of their children excited the deepest compassion of Raikes, who began to feel that the greatest service he could render Gloucester and England was to awaken the nation to the gravity of what was happening.

Often, when he was at work in his office, the quiet was broken by loud shouts and profane language as the children fought in the streets. Through the window he watched them, not in anger but in sorrow. Over and over he asked himself what could be done for the street arabs, who were glad to escape from their miserable homes and mingle with others. It was no wonder that crime was rampant, and that to cheat, steal and lie, were not regarded as things of which to be ashamed. Sunday Schools were unknown; there were no government schools, and only the children of wealthy and privileged classes had any chance of getting an education.

Raikes did not blame the children for their profanity and dishonest habits; rather he asked, what else could be expected. When he remembered the homes from which they came, he knew it could not be otherwise. He disagreed with

many of his friends, who believed in severely punishing even the smallest crimes without taking into consideration the causes of such lawlessness. When they told him that the masses of the people were incapable of improvement and had no right to education, he flatly contradicted them, and said that the State had no right to punish people unless, in the first place, it did something to instruct them in right living.

But it was what he saw that day in St. Catherine's Meadows that caused Robert Raikes to arrive at a sudden decision. He decided to form a Sunday School where boys and girls could be instructed. Whether the experiment would meet with success or no he was not sure, but he resolved to make the attempt. Here is what Ernest H. Hayes, in his *Life of Robert Raikes* says of the first experiment: "Mr. Raikes found a teacher in Mrs. Meredith, who lived in Sooty Alley, one of the worst slum districts of the city. Mrs. Meredith agreed to use her kitchen on Sundays as a kind of school, for the sum of one shilling a week. To this woman Robert Raikes brought such ragged urchins as he could induce to attend. Probably some of them were children of the debtors in the goal, for this first Sunday School in Gloucester was situated opposite the prison itself."

Later, Raikes found a woman named Mrs. Marry Critchley, who impressed him as being a

strong-willed, capable person, well able to handle the restless ragamuffins that he wanted to reach. He explained to her what he was trying to do, and she fell in with his plans. She moved into a large house near the parish church, and here Raikes carefully organized what really was the first Sunday School. For the school in Sooty Alley was only a temporary expedient until Raikes could find suitable premises and a capable teacher.

At first, only boys were admitted to Dame Critchley's Sunday School. From the written recollections of those who remembered it, the first scholars were a rough and noisy lot. They were boys who did not recognise any authority except that of their fathers, and this rested solely on brute strength. It is no wonder that Raikes had great difficulty in getting them to attend. But that was only the beginning of his troubles, for when he did get them there, they behaved like wild men.

Doubtless some boys came because of the novelty. But, as Mr. Raikes insisted upon their learning passages of Scripture and verses of hymns, many of them did not attend a second time. None of the boys could read, so there were no books at first. The boys sat on rough benches or on the ground in the centre of the room. The floor was of rough flagstones, and there

certainly was nothing attractive about the room itself.

This is how one writer describes a session in that first school. Mrs. Critchley would announce a hymn and begin to sing in a high-pitched voice. "Now, boys," she would say, "sing this line after me." Some of the younger boys might begin, but they would be instantly interrupted by cat-calls and loud jeers from the older boys. Mr. Raikes would be out looking for new scholars, and Mrs. Critchley would threaten to tell him about their conduct when he arrived. There was little order, however, until Mr. Raikes did arrive, probably bringing a number of scholars with him.

Fortunately, even the roughest boys liked Robert Raikes and gave him good attention. An old lady who went to one of his first schools, never forgot how he seemed to charm boys and girls. She said: "Mr. Raikes had a very good way with children. He had authority with them, yet they were not afraid of him. He would pat them on the head and on the cheeks and say that they were good and nice and clean, if they were so. He liked to see boys' and girls' hair combed. Many of the children had never seen a comb before he gave them one. Their hair was matted, and it was not easy to use a comb at first."

Often, after Sunday School was dismissed, Mrs. Critchley would be completely discouraged,

and would say that she felt it was a waste of time to try to teach them. No matter how discouraged Raikes was — and no doubt at times he also felt like giving up — he would encourage her and point out the improvement he noticed in certain pupils as a proof that good was being done. "We must just try, try, and try again before we give up the attempt," he said.

Gradually a handful of boys began to come regularly and to show some real interest in what they were taught. They were anxious to behave themselves and to meet with Mr. Raikes' approval. One of the first requirements was personal cleanliness — something which most of them found it hard to fulfil. As he went from door to door Mr. Raikes would say to the parents: "All that I require are clean hands, clean faces and hair combed." At the same time he did not turn children away because they were ill-kempt and ragged. "If you have no clean shirt," he would say, "come in what you have." When they excused themselves because of their tattered garments or shoeless feet he would say: "If you can loiter about the streets without shoes and in ragged clothes, you may as well come to Sunday School and learn what you can."

School began at ten o'clock on Sunday mornings and continued until one o'clock. There was another session in the afternoon, which was not

dismissed until five o'clock. Afterwards girls were invited to attend, and Mr. Raikes went a step further with them. He provided them with bonnets to wear on Sundays. This was done doubtless because the urchins were without hats, and Mr. Raikes wished them to attend the parish church with him on Sunday afternoons.

Strange as it seems now, the unselfish efforts of Robert Raikes to help those around him aroused considerable opposition. Many from whom he had a right to expect assistance either opposed him or regarded his interest as a fad. Even the clergymen of his day seemed indifferent. He writes: "I had been working with the children for six years before the vicar of the parish condescended to give me any assistance." The attitude of wealthy people towards the poor was generally snobbish and selfish. As Mr. Ernest Hayes says: "They regarded the poor as a lower order of creation, who ought to be satisfied with the station in life to which God had been pleased to call them."

Some people were alarmed at Robert Raikes' interest in what they termed the "vulgar masses." They were especially alarmed when they knew that he was teaching the children of the poor to read and write. Ridiculous stories were spread around in order to frighten parents whose children were attending Sunday Schools. One rumour

was that Mr. Raikes was gathering the children together in order to send them as slaves to the West Indies. Many people believed these tales, and in some cases parents forbade their children to attend.

The leading magazines of that day frequently published letters written by indignant persons who bitterly attacked Mr. Raikes and accused him of every evil of which they could think. For several years he received very little encouragement and had to fight his battles almost single-handed. In Scotland the opposition was especially strong, many declaring that Sunday Schools cast a serious reflection upon both the clergy and parents. One Scottish leader said: "These schools in the end will destroy all family and public religion." Such proportions did the opposition assume that the cabinet of the Pitt Government seriously contemplated bringing in a bill for the suppression of Sunday Schools.

On the other hand, there were such signs of improvement in every district where a Sunday School was begun, that visitors began to come from other cities to see the results for themselves. Mr. Raikes would invite these visitors to catechise the children for themselves and to hear them sing, and recite passages of Scripture. Before long, Sunday Schools were established in other towns and cities. Gradually the foolish and ridiculous

rumours were laughed out of existence and sensible people were very glad to recognize the extraordinary success of this great experiment. Before long the movement spread to the United States, and in 1786 a Sunday School was established in Hanover Country, Virginia. Others quickly followed, and in 1791 the first school was opened in Philadelphia.

Soon Mr. Raikes, who had been so much abused and misrepresented, began to receive honours in abundance. Queen Charlotte sent for him that she might hear from his own lips the story of his wonderful movement. Her husband, King George III, paid a visit to some Sunday Schools and uttered the wish that every child in his Kingdom might be taught to read the Bible. In hundreds of villages, where previously there had been little for boys and girls to do on Sundays but watch dog-fights, prize-fights and even to take part in drinking and vice, Sunday Schools were opened and thousands of children had their attention turned to better things. A shoemaker named James Kemp, living in Hoxton, walked to Gloucester and back — a distance of 220 miles — in order to interview Raikes. He was so favourably impressed with what he saw that when he returned home, he began a Sunday School which had remarkably fine results.

Mr. Raikes died on April 5, 1811, in his

seventy-sixth year. He was sitting at his desk when he suddenly collapsed and, in spite of all that could be done by loving hands, in half an hour he passed peacefully away. Although greatly respected, few realized even at the time of his death, when Sunday Schools had been established for thirty years, what a marvellous movement Robert Raikes had begun. The great English historian, J. R. Green, said, "The Sunday Schools established by Mr. Robert Raikes of Gloucester at the close of the eighteenth century were the beginnings of popular education."

To-day the Sunday School force is indeed a vast multitude, to be found everywhere, with more than thirty million members. The good that has already been done is greater than anyone could imagine, yet no one thinks that its work is much more than well begun. Like many other noble men and women, Robert Raikes builded better than he knew.

CHAPTER VIII

THE MAN WHO WAS WITHOUT FEAR

CHARLES GEORGE GORDON, better known the world over as "Chinese Gordon," was born at Woolwich, England, in 1833 As a boy he had a care-free, happy-go-lucky disposition which got him into trouble on more than one occasion His love of mischief at the military training-school in Woolwich, which he attended, almost led to his expulsion A senior cadet was stationed at the top of the stairs to prevent the younger cadets from rushing into the dining-room. The sight of this self-important, officious person standing with outstretched arms to hold the boys back, was too much for young Gordon He butted the officer in the stomach with his head, sending him downstairs and through a glass door Only Gordon's previous good record prevented his being sent from the school in disgrace

He served in the Crimean War (1854-56) where he established a reputation for courage which grew as the years went by In 1863 he went to China to subdue the "Taiping" rebellion He was so successful that the Chinese Emperor offered him a gift of three thousand pounds, which

Gordon promptly refused. The Chinese authorities led chiefly by Li Hung Chang, had killed some rebel chiefs whose lives Gordon had promised to spare. As a result he quarrelled with the Government, spurned their money, threatened to shoot Li Hung Chang for his treachery, and openly sought him with a revolver in his hand.

Still a young man, Gordon returned to England with a great reputation for courage. The fact that he had flatly refused the money offered him by the Chinese Emperor increased the esteem in which he was held. He was honoured by Queen Victoria and made Colonel of his regiment.

For six years Gordon worked at Gravesend on the Thames. During that period he turned to do what was always near to his heart, relieving distress wherever he could. He became interested in a school for ragged boys in the East End of London. He was as proud of the ragged urchins there as he had been of his "Ever Victorious Army" in China. He equipped hundreds of these boys for important positions in life.

The Civil War in America was taking place at this time, one result of which was to keep off cotton from the looms in England. Such acute suffering resulted that literally thousands of Lancashire mill-workers faced starvation. The Chinese Empress had presented Gordon with a large and valuable gold medal which he greatly prized. But

during the cotton famine, he scooped out his own name and sent it anonymously to help the fund which was being raised to help the suffering poor.

In 1874 he was sent to Egypt in order to assist the Khedive of Egypt to subdue the slave traffic. This had reached such proportions that it had become an open sore in the life of Africa. So profitable and fully organized had the trade in slaves become that sixty per cent of the native population of the Soudan was living in slavery and under conditions of almost unbelievable cruelty. The slave-owners, who had neither pity nor conscience where the poor blacks were concerned, became rich and powerful. Under the leadership of a particularly savage slave-owner named Sebehu, they actually defied the Khedive and his government.

Helpless and humiliated, the Khedive sent to England for help. Gordon was sent to organize and lead the Khedive's forces against the organized lawlessness of the slave-owners. From Cairo Gordon set out for Khartoum, making his first voyage up the Nile with a small force of some 200 Egyptian troops. It was a long tedious journey. The Egyptians were terrified by the crocodiles and discouraged by the difficulties. Gordon worked with such ceaseless energy that the indolent Egyptians were shamed into pushing ahead. At last, after many thrilling and dangerous

adventures, Khartoum was reached. From there Gordon pushed on up the Nile to Gondorko.

He found the people sunk in hopeless misery. The surrounding country was peopled by savage tribes whose wretchedness had been made more severe by the cruelty of slave-owners who had stolen their cattle and raided their homes again and again. Gordon felt that he was being humbugged by the Khedive. He began to feel that the ruler did not want to crush slavery, but simply to do something to pacify the English people, whose indignation had been roused by news of what was happening in the Soudan.

The slave-owners had their spies and agents everywhere. Gordon repeatedly found plots against himself, and discovered that his own officials were taking bribes to betray him. His troops were lazy and cowardly, and in that strange, far-off country he began to wonder if there was anyone whom he could trust. The wretchedness of the poor Soudanese people was almost unbelievable. Gordon taught them how to cultivate their fields and plant maize. He gave away all the money he had, and nursed the sick with his own hands.

The news of what Gordon was doing spread far and wide among the half-savage people of the Soudan. He was absolutely without fear, and did not hesitate to go alone where no

Egyptian official would have ventured without a large number of soldiers. Often he strolled along the banks of the Nile for many miles, unarmed and alone. He was not a boastful man but he once said: "When God was portioning out fear to all the people in the world, at last my turn came, and there was no fear left to give me." Here he was in the Soudan, the only European for hundreds of miles, surrounded by people who were in many cases actually cannibals, and not sure that he could even trust his own men. Yet he lived day after day, absolutely without fear.

Another unusual thing about Gordon — a trait almost as strange as his fearlessness — was his utter contempt for money. The Egyptian Government offered to pay him ten thousand pounds a year. He accepted only one-fifth of this amount. "How could I take more," he said, "when the money comes from this poor unfortunate people?" Practically all the two thousand pounds which he received annually, he gave to the blacks around him. Few men have ever shown the same disdain for money. On one occasion he was known to have seven thousand pounds. In a few months he was penniless, and his friends found that he had given it all away.

Sickened and disgusted by the Khedive's weakness and duplicity, he resigned his command

in 1876, and returned to England. In 1877 he was made Governor-General of the Soudan, and returned with greatly increased powers, no longer hampered by the treachery of the Khedive. This time he tackled the work of subduing the slave traders with tremendous energy. He raided their camps and found thousands of wretched slaves, some actually dying of hunger and thirst. These he liberated. Such was his courage that even the slave-owners believed that there was some charm about him, and that he could not be killed. During the two years that he was Governor-General, Gordon travelled over eight thousand miles over the sandy deserts beneath a blazing sun. Even the people of the country could not stand the pace he set, but in 1879 he returned to England almost completely worn-out.

After he left the Soudan there arose a strange, sinister man named the Mahdi, who made all manner of wild and impossible pledges to the people, and led a fanatical revolt which spread like wild-fire. The Mahdi exterminated an army of eleven thousand Egyptians with great cruelty. He massacred all who stood in his ambitious way. This was in 1881, and Gordon was in England. He was asked to go at once to Khartoum and relieve the situation there.

The story of his long and perilous journey over desert sands to Khartoum is one of the

most thrilling in all history. Once in the city, he took hold of the very difficult situation. He burnt the instruments of torture which the Egyptian Government had foolishly used to punish the people. He spent all his own money to relieve distress. He appealed to men in official positions to exercise mercy and to manifest justice, and in an amazing manner he brought order out of chaos.

But the Mahdi was gathering his troops in a menacing manner around the city, like a tiger ready to spring upon its prey. In vain Gordon waited for the troops from England to relieve him. With hopeful and expectant eyes he looked across the desert stretches. Weeks became months, and only the security of his presence prevented the people in the city from becoming panic-stricken. He haunted his palace roof, ever eagerly alert when a speck appeared upon the horizon, and always wondering why relief did not come. "Perhaps help will come to-morrow," he said, sadly, at the close of each disappointing day.

The famine became more acute. Hundreds sickened and died every week. Donkeys and dogs and even refuse were devoured daily by the desperate people. The river overflowed and carried away part of the fortifications. The hosts of the Mahdi swarmed in, for the famished garrison was no match for them. Gordon, desperately

thin and wasted, but fearless as ever, went forward to meet the invaders, revolver in hand. He confronted them at the top of his stair-case. A spear struck him; then another and another. A day later, the British advance guard under the leadership of Gordon's old friend, General Wolseley, reached Khartoum. It was too late. Gordon's body had been hacked to pieces, and his severed head lay at the Mahdi's feet.

Gordon is buried in St. Paul's Cathedral in London. Many other military and naval men are buried there, including the Duke of Wellington, Lord Nelson, and Admiral Collingwood. But people do not think of General Gordon merely as a military man, but rather as a great philanthropist and above all, a great Christian. He described war as "a brutal, cruel affair," and gave his life to bring to an end the horrors of the slave-traffic. It is not surprising that on his monument in St. Paul's Cathedral are these words: "At all times and everywhere he gave his strength to the weak, his substance to the poor, his sympathy to the suffering and his heart to God."

CHAPTER IX

THE MAN WHO STARTED KINDERGARTEN SCHOOLS

FRIEDRICH FROEBEL was born at Oberweissbach, a village in Germany, on April 21, 1782. Not long after his birth his mother died. Friedrich's father, who was pastor of the Lutheran church in the village, was left to care for five motherless boys. Soon after, his father married again. But Friedrich's step-mother was unkind to him, especially after she had children of her own.

His father was a conscientious and hard-working clergyman. But with a parish of over five thousand people, he became so absorbed in his studies and church work that young Friedrich felt neglected and unhappy. Whenever anything went wrong, his step-mother blamed him, and complained to his father that the boy had been rude and unruly. Unfortunately, his father too often accepted these reports and punished him.

When Friedrich was ten years old, an uncle who was also a clergyman came from another town to visit his father. He was a man with a gentle, affectionate disposition, whose only child

had died some time previously. Perhaps he noticed how unhappy the timid, motherless boy was, for he begged Pastor Froebel to let him take Friedrich to his own home. The father consented and the boy entered a home where he was surrounded by cheerfulness and loving sympathy.

For the first time in his life, young Friedrich associated with other boys in their games. He felt awkward and slow when playing games, not having had any previous experience. However, he enjoyed every form of outdoor exercise, and became greatly interested in the flowers and birds in the countryside. Until this time he had been kept down, scolded and denied any real fun. Now he felt free and as happy as could be. The change which he experienced in passing from one home to another made a deep and lasting impression on his mind, and was destined to have a great influence on his after-life.

Friedrich was sent to school in the town where he now lived. He received instruction from two teachers. One teacher was stern and severe. He rebuked any inattentive boy sharply, and flogged any who misbehaved. He inspired such fear in the pupils that when in his presence they were self-conscious and timid. The other teacher was quite the opposite. There seemed no limit to his patience, and if he had to rebuke pupils, he did it so kindly that they felt ashamed

of what they had done. Although he was only ten or eleven years of age, Friedrich could not help noticing how much better the boys learned when taught by the kind teacher. This also was a lesson that he remembered all his life.

When Friedrich was old enough to leave school, he had grown to love the out-of-doors so much that he asked to be taught agriculture in its widest sense. He was apprenticed to a man who agreed to teach him forestry, geometry and land-surveying. He greatly enjoyed life in the open, for he loved mountain, field and forest. However, when he was seventeen, he went to visit a brother who was a student at Jena University. Friedrich himself began to study at Jena in 1799.

His college life was saddened by an unpleasant experience. His father had given him a sum of money — all he could afford — which was just enough to permit Friedrich to pay his way by living in a frugal manner. His brother at the college needed money and borrowed some from Friedrich. When the time came to pay it back, he was unable to do so.

Friedrich was in real difficulty. The keeper of an eating-house had him summoned for debt, and he was sent to the college prison for nine weeks. Finally, his father advanced the money necessary for his relief. Humiliated and saddened

by his gloomy experience, Friedrich continued his studies. He was still very much undecided as to what he should do in life. At this time a friend introduced him to the Headmaster of the Frankfurt Model School. This man urged Froebel to give up the idea of forestry and take up the profession of teaching. He said, "Your real vocation is teaching. We want a teacher in our school. Say that you agree, and the place shall be yours."

Friedrich Froebel was twenty-three when he went to Frankfurt. Education at that time was not compulsory, and schools were neither interesting nor attractive. Friedrich's own boyhood had been far from happy, and he disapproved very much of the way in which schools were then carried on. At that time there was living in Switzerland a man named Pestalozzi, who was advancing new methods of teaching. Froebel visited him, and while he did not agree with all this man's methods, he was convinced that Pestalozzi was on the right road. His own convictions about school-life were confirmed.

There were two hundred pupils in the Frankfurt School. Froebel taught arithmetic, drawing, geography and German. He tried his own ideas in teaching. He was not satisfied to have the pupils simply sit and listen while he taught. He invited them to ask questions, and did his utmost

to make them feel at ease — not timid and afraid, as they so often were.

Sometimes he took the boys out into the woods. There he lived his boyhood over again as he talked with them of trees, flowers and birds. He made every subject he taught interesting. If a boy did not seem to be interested, he did not scold the pupil, but instantly began to think out plans for making his teaching more attractive. He was strongly opposed to flogging pupils, a practice which at that time was quite common. Speaking of this period of his life he afterwards said: "I felt as happy as the fish in the sea or the birds in the air." When the public examination of this school was held, the results were so satisfactory that the parents and other teachers were unanimous in saying that Froebel's method — while new and unusual — had certainly produced marvellous results.

Froebel said that in this happy intercourse with his pupils they taught him as much as he taught them. He had never thought that physical exercise had any place in education — no one at that time did — but now he began to feel that a boy should develop physically as well as mentally. He encouraged them to play games and, as far as he could, he took part in them. He said: "I watched the boys at play and soon saw that games had a mighty power to awaken and stimulate intelligence."

The Napoleonic war was taking place at this time, and in 1813 Froebel enlisted in an infantry corps of the German army. So his life as a teacher was interrupted. However, he returned to it two years later. In 1816 he began a school known as the Universal German Educational Institute. He had now for the first time in his life an absolutely free hand, and so was able to try his ideas about teaching. He began with six pupils, but the reputation of his school spread so that in a few years he had fifty-six boys.

Froebel said that no teaching could be successful unless it awakened in the minds of pupils the spirit of inquiry and the desire to learn more. One of his favourite saying was: "Mere instruction is not education." Although at that time most people thought that hand-work was pure nonsense, Froebel said that in any complete system of

such people found fault with Froebel's teaching. Often bigoted people would visit the parents of pupils attending his school and poison their minds against him. Thus Froebel, who was an extremely sensitive man, was greatly discouraged.

He became convinced that the education of children ought to begin early. So in 1829 he opened a school for children from three to seven years of age. Little ones were taught in a natural and sympathetic way, so that school would become more and more attractive. For a long time Froebel racked his brain, trying to think of a suitable name for these new schools for little tots. One day, while walking with some friends he kept repeating: "Oh, if I could only think of a suitable name for my youngest born!" Suddenly he stood as if fettered to the spot. "Eureka," he fairly shouted, "I have it! *Kindergarten* (child-garden) shall be the name of the institution."

For the remainder of his useful life Froebel devoted himself to the establishment of Kindergarten schools. He was often so straitened for money that he had to pawn his personal belongings. He once allowed the whole of his household furniture to be sold at public auction in order to get money to carry on his work. For a time, when advanced in years, he was without a permanent home and endured considerable discomfort.

He died on June 1, 1852. During his lifetime many people failed to understand him; often those who ought to have encouraged him showed bitter opposition. Yet his work lives on. After his death, others took up his ideas, and to-day the Kindergarten is found in every land where education has its proper place in the life of the people.

CHAPTER X

THE FATHER OF ANTI-SEPTIC SURGERY

EVEN as recently as a hundred years ago, surgical operations were ghastly affairs, and nobody was willing to undergo one unless as a last resort to save life. There was no anaesthetic such as chloroform, and one can scarcely imagine the sufferings of those who submitted to the surgeon's knife. Patients were held down or strapped to the table, and it is no wonder that countless numbers of sick people preferred to die rather than submit to the surgeon's knife.

The pain was certainly bad enough, but the patient's chances of recovering were small indeed. In the first place, the hospitals were terribly overcrowded, and those suffering from various diseases were often herded together like cattle in a pen. Patients with broken limbs were often compelled to share beds with others who were afflicted with loathsome running sores. Such a thing as a patient having a bed to himself was unusual, and it is no wonder that diseases spread rapidly and that hospitals were avoided by the very people who needed them.

One of the largest hospitals in Paris had 1,200 beds for 3,000 patients. Frequently every available inch of floor space was used for the sufferers. Diseases such as gangrene, blood-poisoning and erysipelas spread so rapidly that sixty out of every hundred operated upon died of these scourges after the operation. The air was filled with innumerable disease-carrying germs. It is no wonder that one writer says: "The public gutter was a safer and better place than the hospital ward for accident cases."

A devouted young surgeon was so moved by what he saw in the hospitals that he resolved to devote his life to making hospitals places of healing rather than breeding-places of disease. This was Joseph Lister. He was born in the village of Upton in Essex, England, on April 5, 1827. His people were Quakers, deeply religious, and known throughout the countryside for their goodness of heart. Joseph Lister spent a happy childhood. Even as a small boy he resolved to become a physician.

When he was seventeen he was sent to University College in London. There he studied so hard that he had a nervous breakdown. In 1852 he obtained his degree as a Bachelor of Medicine, and the serious work of his useful life began. In 1853, when 26 years of age, he went to Edinburgh where, for a time, he lived

with Doctor James Syme, one of the greatest surgeons of his day. Joseph Lister frequented the hospitals in Edinburgh, as he had done in London, and what he saw in both cities sickened and depressed him. To witness the frightful agony of afflicted people was bad enough, but to know that in spite of all the suffering the vast majority would not recover was even worse.

In January, 1860, Doctor Lister was appointed Regius Professor of Surgery at Glasgow University, and was made a surgeon of the great infirmary there. There he watched and helped to perform hundreds of surgical operations. He rejoiced to notice the beginning of the work of healing and recovery. Then, gangrene and inflammation would set in, and the patient would sicken and die. What was it that arrested the process of healing and carried off the great majority of patients, even when recovery seemed certain? This was the vexing question which Doctor Lister asked himself over and over.

Physicians of that day saw through powerful microscopes that millions of germs appeared wherever there was decay and fermentation, so they concluded that living things originated in the diseased parts. How else, asked these men, could these germs — which had a million descendants in forty-eight hours — be accounted for. And nobody cared to question what had been

believed by scientists for centuries. Then along came a man who dared to question this theory. This was the great French scientist, Louis Pasteur. He insisted that these vicious germs came from disease-laden air, and that if wounds were properly cared for, and — still more important — if all the physician's instruments were thoroughly sterilized, the germs could not get to the patient and kill him.

Pasteur was hotly attacked for his new theory, but Doctor Joseph Lister agreed with him and wrote the Frenchman a cordial letter of appreciation. For a long time the dirt and filth to be found around every hospital had irritated Lister beyond measure. He was convinced that there was a connection between dirt and disease, and he looked around for some substance that would kill germs, whether in a wound, on surgical instruments or wherever they were to be found. He hit upon *carbolic acid*, and that was indeed a valuable discovery.

The first dressings of raw carbolic acid he used were too strong, and caused severe burns. Instantly critics condemned Doctor Lister and denounced his "carbolic acid fad". Lister was not discouraged. He found a Mr. Calvert who supplied him with a pure and soluble acid, which enabled him to decrease the strength of the carbolic so that there was no longer any

danger of burning patients. The first carbolic dressings were used in March, 1865, but they were discontinued for a year until Doctor Lister found the safeguard against burning.

It seems strange that up to that time scientists had not noticed the connection between dirt and disease. In 1789, the prison reformer John Howard wrote: "Wards were often so offensive as to make necessary the use of perfume The physician in going his rounds was obliged to keep his handkerchief to his nose." When he was house-surgeon at Glasgow Infirmary, Doctor Lister traced a fetid odour to a cholera catacomb, a dead city of loaded coffins under the buildings.

In an article printed in *The Nation Magazine*, Edythe Helen Brown writes: "Surgical instruments were kept no cleaner than household scissors. The surgeon dashed his lance into soapsuds, thrust it into a crumpy pocket while preparing the patient, and then proceeded to slit an abscess. One probe explored an old woman's ulcer, the tuberculous wrist of a labourer, the raw wound of a tetanus sufferer. The surgeon used his teeth to hold the operating knife, looking like a savage pirate. His coat was stained with pus and blood spatters."

Doctor Lister set out to change existing conditions, and to do it thoroughly. He multiplied

the amount of soap used in the infirmary more than ten times; instead of one towel for each operation, he demanded scores, and ordered such quantities of carbolic acid that the hospital assistants gasped. Maids, nurses and even doctors grumbled at his vigorous methods to secure cleanliness, but there was no stopping the germ-scourging campaign. New faucets were put on the taps so that there might be a constant and abundant supply of water. He insisted that doctors work with rubber gloves, and that all instruments used in surgical operations be thoroughly sterilized after use.

Like his friend Pasteur, he was bitterly attacked by men who disliked his methods, and who sneered at what they termed his fanaticism. But Doctor Lister was a simple, straightforward man. He refused to be dragged into a public controversy. "Nothing but actual experience will show whether my methods are right or not," he said, and he went on in his kindly, quiet way, with a peculiar calm dignity which inspired confidence in him.

Soon it became evident to all that Lister's antiseptic surgery was a boon and a blessing to countless numbers. In all hospitals where his methods were followed gangrene, blood-poisoning, inflammation and other devastating diseases were reduced to such an extent that Lister himself was

both astonished and happy. It is no exaggeration to say that tens of thousands of patients were restored to health and to lives of usefulness and happiness who otherwise would never have left the sick bed. It was an actual fact that before Lister's day a patient who was laid on the operating table of a hospital was exposed to far more chances of death than a soldier in the midst of a fierce battle. One writer truly said: "Doctor Joseph Lister saved more lives by his antiseptic surgery than Napoleon Bonaparte succeeded in destroying in all his campaigns of bloodshed."

When the controversy died down, and Lister's ideas were adopted everywhere, honours poured in upon him. He was made president of the Royal Society of Surgeons and of the British Association. Honorary degrees from Oxford, Cambridge and other universities were conferred upon him. In 1902 King Edward VII set the final seal of the Empire's approval upon him by making him a member of the Order of Merit. He had been made a peer in 1897 and thus became Lord Lister.

He was reserved almost to the point of shyness. Social distinction and public applause meant little to him. The object of his life was to fight disease and suffering, and his chief happiness came in making others happy. He

lived until February 10, 1912, when he died in his eighty-fifth year. He was buried beside his wife in a London cemetery. A great public service was held in Westminster Abbey, where he would have been buried but for the instructions contained in his will.

It is pleasing to reflect that the three great physicians who worked with such magnificent purpose to fight disease, Louis Pasteur, James Young Simpson and Joseph Lister, had such generous and cordial admiration for each other. Yet it is not surprising, for truly great men are humble; they think, not of themselves, but of the good they can accomplish.

CHAPTER XI

THE MAN WHO SLEW GIANT DESPAIR

ONE night in 1920 a tall, slim, grey-haired man stood on the platform of Massey Hall in Toronto, and turned unseeing eyes towards the three thousand people seated before him. In a wonderfully sympathetic and musical voice the blind man repeated these lines from W.E. Henley's courageous poem:

Out of the night that covers me,
Black as the pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.

It matters not how straight the gate,
How charged with punishments the scroll,
I am the master of my fate,
I am the captain of my soul.

The sightless man was Cyril Arthur Pearson, and no words could better express his own attitude to what many others considered a crushing misfortune, than these ringing lines of Henley.

Arthur Pearson — as he was known to multitudes — was born at Wookey near Wells in the south of England on February 24th, 1866.

His father, who was curate of the Church of England, was a grandson of the Rev. Henry Francis Lyte, author of the immortal hymn, "Abide With Me." All boys are inquisitive — so they say. Young Arthur Pearson was more so than the average. He could ask enough questions in a few minutes to drive his seniors to distraction, and this trait of character he retained throughout life. He was severely handicapped, however, by extreme short sight, so much so that, although he loved games and played them with all his might, his defective eyesight prevented him from excelling as he might otherwise have done.

In 1880 Arthur Pearson was sent to Winchester school. A boy who was then at Winchester distinctly remembers Arthur's arrival. Here is his account of it: "At the beginning of the term in 1880 there arrived a small, dark boy in spectacles, with a curious, jerky manner, and an equally jerky way of speaking. He took no high place in school, but he had a certain alertness and intelligence which bespoke character, and he was popular at once. He was too blind to play games well, but he was a fair bowler and played for the Junior House." Another school-fellow wrote: "He was early discovered to be a promising bowler at cricket, but he could not see well enough to bat or field."

In 1884 the editor of the popular English magazine *Tit-bits* announced an important contest For thirteen successive weeks ten difficult questions would be printed to which competitors might send in answers The first prize was a situation in the office of *Tit-bits* with a salary beginning at a hundred pounds a year. Arthur Pearson, along with hundreds of others, entered the contest and he secured the first prize As a result, one day in September, 1884, the successful eighteen-year-old contestant presented himself at the office of *Tit-bits* and began his journalistic career

The six years which followed were important ones in his life He had an amazingly active mind, and was constantly on the look-out for subjects that would make interesting reading Mr George Newnes, Editor of *Tit bits*, was not slow to recognize the value of Arthur Pearson's work, and his salary was repeatedly raised until it had been increased to almost four times the original amount However, in 1890, although still a very young man, he decided to sever his connection with *Tit bits* and establish a magazine of his own, to be known as *Pearson's Weekly*

The first number of this paper was published on July 26, 1890 Arthur Pearson announced that his motto would be "To interest, to elevate, to amuse" He aimed to make it the most interesting paper in the world The new paper

met with a favourable reception. It is interesting to know that the first issue contained an article by Arthur Pearson himself, entitled "Curiosities of Blindness." Doubtless the condition of his own eyes made him sympathetically interested in the sightless.

As *Pearson's Weekly* succeeded, Arthur Pearson launched other new magazines, and before he was thirty years of age, he was providing reading for a vast number of people. He was straightforward, anxious to do all the good he could, with a young man's natural ambition to succeed. He loved the well-known motto: "I shall pass through this world but once. Any good, therefore, that I can do, or any kindness that I can show to any human being, let me do it now. Let me not defer or neglect it, for I shall not pass this way again."

Arthur Pearson was by this time a fairly wealthy man, and in a position to carry out some plans he had in his mind. In 1892 he began a Fresh Air Fund, in which readers of his papers in all parts of the world became interested. He invited friends to send in money contributions which were to be used to send children from the thickly-congested East End of London into the country for one day. The idea caught on from the beginning. The first year, twenty thousand children who had never

even seen the country, were taken from the crowded streets to Epping Forest. The second year forty thousand were taken. Each year the number of children given a holiday was increased until in 1921, the number had grown to 1,65,743. In order to make the money go as far as possible, a fee of nine pence was charged. For this sum the children were taken to Epping Forest, given a meat pie for dinner, and tea, bread and butter and cake for tea with some other attractions thrown in. In addition to the day's outing, arrangements were made whereby some of the delicate children were enabled to stay in the country for two whole weeks. In 1921, six thousand one hundred and twenty-seven children were enabled to have this fortnight's vacation.

The Prince of Wales celebrated his twenty-seventh birthday at Epping Forest with Pearson's Fresh Air children and it was difficult to tell who enjoyed themselves more — the Prince or the children. A few days later the Prince wrote to Arthur Pearson and said: "I shall be glad if you will cause it to be known that should any one wish to make me a birthday present, they cannot give me one which I shall appreciate more highly than a contribution to the Fresh Air Fund."

Arthur Pearson's eyes got steadily worse. On March 18, 1908, he underwent an operation

for glaucoma. After this operation he was never really able to see well enough to write or read again. He knew that it was only a matter of time until he would become quite blind. He travelled extensively, so that when total darkness came his mind would be stored with memories of beautiful places that he had visited.

In 1913, he went to Vienna in order to consult the great Austrian oculist, Professor Fuchs. After a careful examination the Professor advised him to put his affairs in order and to give up active business. Pearson asked him how long it would be before he became quite blind. At first the oculist said, two years, but afterwards confessed that he thought it would be less than one year.

Although the blow was not unexpected, it was a severe sentence for a man who was not yet fifty years of age. Some time before this he had been knighted, and was now Sir Arthur Pearson. He resolved above all things to be cheerful and to devote the remainder of his life to helping other sightless people. In October 1913, he joined the National Institute for the Blind, and from that time until his death he gave every ounce of strength he had, and much of his wealth, to make the institution more efficient.

He was made treasurer, and so boundless was his enthusiasm that in eight years he increased

the income of the Institute nearly five hundred per cent. He used his magazines to stimulate interest in blind people, and one result was that the number of books printed in Braille type was multiplied several times. In addition to the Bible, scores of the best books in the English language were made available to those who "sit in darkness". Besides this, teachers were engaged to teach trades to thousands of blind men, women and children, who were thus enabled to fill a useful place in life. Owing chiefly to Sir Arthur Pearson's efforts, branches of the Institute were opened until there were fifteen well-equipped centres in Great Britain.

Early in 1915, during the days of the Great War, Sir Arthur Pearson was told of a blinded Belgian soldier who had been brought to one of the London Military Hospitals. He immediately went to see this man, talked with him and did all he could to cheer him, for he was inclined to be despondent. Then he heard of two blind British soldiers in another hospital. He went to see them, and felt that something should be done for blinded soldiers who were constantly arriving from the scene of war. A house was opened in London with four blind men as the first inmates.

Soon afterwards, Mr. Otto Kahn, the New York banker, placed his beautiful home with its

spacious grounds in Regents Park at Sir Arthur's disposal and thus began the remarkable work for blind soldiers at St. Dunstan's. As a result, hundreds of men have been taught trades and sent out into the world of action, having rid themselves of that feeling of helplessness which besets so many blind people.

From the beginning, Sir Arthur Pearson determined that if there was to be in London one place more cheerful than every other, it should be St. Dunstan's, and he succeeded in making it so. Every blinded soldier — and soon there were seventeen hundred of them in St. Dunstan's — was interviewed by Sir Arthur who, blind himself, understood them thoroughly. His courage was contagious and his cheerfulness and happy disposition seemed to put new life into even the most despondent. Visitors to St. Dunstan's, who in many cases expected to find it a depressing place, were astonished to hear more hearty laughter and optimism than they found among people in possession of sight.

It would be impossible to tell, in this chapter, all about that wonderful place. Eight occupations were taught: massage, shorthand writing, telephone operating, poultry-farming, carpentry, mat-making, boot repairing and basket-making. Every man, of course, was taught to read Braille. In other institutions for the blind it

generally took five years to teach Braille; at St. Dunstan's the men learned it in six to nine months.

What happened at St. Dunstan's was little short of a miracle. The men were encouraged to row in the lake in Regents Park, and on any summer morning two or three hundred blind soldiers, full of eager and joyous life, might be seen, not only rowing, but having exciting races and all manner of aquatic games. Sir Arthur wrote an account of what was done at St. Dunstan's under the title, *Victory Over Blindness*. No book could be more fascinating reading than this account of how hundreds of men, under magnificent leadership, fought and conquered Giant Despair.

Sir Arthur Pearson died suddenly on the morning of December 9, 1921. Seldom has the death of any man been received with greater sorrow. He was just fifty-five years of age, and apparently in good health. From every part of the world messages were sent to his bereaved widow and children. The man who had met even the calamity of total blindness with a smile on his face and who had changed hundreds of depressed men into happy and useful citizens, had somehow infected even seeing people with buoyancy and gladness.

A vast multitude attended his funeral. A

service was held in Holy Trinity Church, Marylebone Road, London, conducted by the Bishop of London and Rev. Prependary E. N. Sharpe, who had himself lost his eyes during the war. The band of the Grenadier Guards led the congregation in singing, "Lead Kindly Light." Later, when "Abide With Me" was sung, men and women wept unashamed. Hundreds of blind soldiers were gently led past the grave of their benefactor and turned towards his last resting-place. Among hundreds of wreaths was one from Queen Alexandra on which she had written:

Life's race well run,
Life's work well done,
Life's crown well won.
Now comes rest.

CHAPTER XII

A GREAT PHYSICIAN WITH HIGH IDEALS

WILLIAM OSLER was the youngest son in a family of nine. He was born in the little village of Bond Head, Ontario, about fifty miles north of Toronto, on July 12, 1849. His father was an Englishman who, after having served fourteen years in the British Navy, decided to abandon that calling and enter the ministry of the Church of England. After ordination he was sent by the missionary society to Bond Head in Ontario, which at that time was on the edge of a wilderness. The surrounding country was settled largely by immigrants from Britain whose courage, love of adventure, and willingness to face pioneer hardships, had led them to seek new homes overseas.

Here is a description of the district shortly before William Osler was born: "The nearest post-office was twelve miles away; the nearest doctor fifteen miles away; the nearest blacksmith six miles away and the roads in every direction were well-nigh impassable much of the time." There were still more Indians than white settlers

in the countryside, and a dozen European nationalities were represented. The country was almost primeval forest. Life there had all the inconveniences, but, at the same time, all the charm which only those who have lived in a new country can understand.

When William Osler was born, in 1849, Bond Head had become a village of about two hundred souls. A girl was born after William, but she died, so that he was the youngest of the eight living children in that backwoods rectory.

Later in life he used to tell about his early experiences. He said that he remembered being tethered with a calf in a field near the parsonage. Not far away was a pail of milk, and William proceeded to investigate — probably to drink — the milk, then fell head first into the pail. As he could not have been much more than two years old when this incident happened, his friends may be pardoned for doubting his recollection of it.

In order to secure better education for his large family, Rev. F. Osler moved to the town of Dundas. To William, who was nine years of age and who had always lived in the backwoods, this town seemed very large indeed. There was what was termed a common school with a Grammar School above it. There were several

churches in the place, and the community boasted a newspaper.

The first morning that William Osler and his brothers went to the Dundas School they were dubbed "Tecumseh Cabbages" as they had been born in Tecumseh township. It did not take the Osler boys long to settle down, but it must be confessed that young William was the biggest imp of them all. In fact, he was expelled from school. The reason for this is not quite clear. But one day as he was passing a room where an unpopular teacher was holding forth, William put his mouth to the keyhole and shouted, "Come out, Old McKee!" As a result of this prank — which seems to have been one of many — William left Dundas School and was sent to the Grammar School in Barrie. That he was a very likeable boy with high spirits and a rollicking sense of humour seems certain. A relative from England, who visited the family about this time, wrote, "William is a light-hearted boy, full of fun, and with many of the tastes and much of the dependableness of a man."

When he was eighteen years of age he was sent to Trinity College in Toronto. His parents wished him to become a clergyman, but William announced his decision to study medicine. After three years in Trinity College he went to McGill Medical College in Montreal which, at that time,

had better facilities than Toronto. Here he worked with wonderful devotion to his studies. In his second year he was awarded a medal by the faculty for a thesis, because it showed "so much originality and painstaking research." After leaving McGill, he took post-graduate work in London, Berlin and Vienna, and in 1874 returned to Montreal to take a position as Professor of the Institute of Medicine.

The "Tecumseh Cabbage," as the lad from the backwoods had been nicknamed by town boys, was now a professor at the age of twenty-five. Furthermore, he had started on a career which was destined to become one of the most distinguished of his generation. But the years of study were packed with many hours of hard toil and conscientious effort. Here is what he himself said, thirty years afterwards:

"I started in life — I may as well own up and admit — with just an ordinary, everyday, stock of brains. In my school days I was much more bent on mischief than upon books — I say it with regret now — but as soon as I got interested in medicine I had only a single idea; and I do believe that if I have had any measure of success at all, it has been solely because of doing the day's work that was before me just as faithfully and honestly and energetically as was in my power."

When he went to McGill in 1874 the young professor had empty pockets. But he had an eagerness to investigate that soon made him one of the leading lecturers in the college. For ten years he remained there, exercising a profound influence over the lives of young medical students, and always having such a thirst for knowledge himself that he was the keenest student of them all. These ten years of his life were important ones for Dr. Osler. He was deservedly popular with the students, with his fellow physicians and with the general public, and when in 1884 he decided to accept an important position as a professor in the University of Pennsylvania at Philadelphia he took with him the good wishes and the affection of a vast number of people.

Doctor Osler was quite different from most of the professors in the University of Pennsylvania, and at first the students were rather disappointed. Many really great men had served the University, but they had generally been conscious of their importance. Doctor Osler lived very simply. Instead of arriving each day in a carriage, he usually jumped off a street-car with a small black bag which contained his lunch. Frequently he quietly slipped in by a back door instead of the main entrance, and when he lectured, instead of orating eloquently from the desk, he generally sat on the edge of a table,

swinging his foot and talking in a quiet, simple, but intense way.

What happened at McGill was repeated at Philadelphia. Osler's amazing thoroughness, his whole-hearted devotion to his work, and the utter absence of personal vanity, soon caused him to be both honoured and loved. While at Philadelphia, he was elected President of the Canadian Medical Association; and, although he never returned to live in Canada, every visit he paid to his native land was an occasion for demonstrations of his popularity. Canadians were justly proud of their boy from the backwoods who was now regarded as one of the world's greatest physicians.

In 1888 the great Johns Hopkins University was built at Baltimore. The hospital authorities looked around for a man big enough in brain and personality to become head of the Department of Medicine in the University. Their choice fell upon the young Canadian, Doctor William Osler, and so at the age of thirty-nine he left Philadelphia to take up his duties at Baltimore.

His appointment created a great stir, for it was one of the most important positions in the entire medical world. He was a comparative new-comer in the United States, and a young man for such a position; but there was no criticism; his appointment was extremely popular

His mother, now far advanced in years, wrote from Canada: "How proud I ought to be of you. I do know that my heart is full of love and thankfulness to God who has showered so many blessings on my life in the matter of dear precious sons and daughters."

Doctor Osler now entered upon the most important work of his lifetime. He tackled the difficult problem of organization, and in a short time had created in the Medical Department of Johns Hopkins University an institution for the care of patients and for the instruction of students which undoubtedly ranks among the best in the world. Here he remained for sixteen eventful years. It is not too much to say that for more than thirty years Dr. Osler remained among the foremost, if not the foremost physician, in the world. Literally thousands of young doctors listened to his lectures and what lectures they were! Although he talked in a quiet, conversational manner he had amazing ability to arouse enthusiasm in his hearers. He believed with all his heart and soul that the work of doctors and nurses afforded great opportunities for serving humanity; he devoutly thanked God for the privileges of his profession, and as students listened they caught his spirit and began to feel as he did. Osler pleaded with students to think of their profession in the highest way. It must

never become, he insisted, simply a means of livelihood but *a call from God* to serve others, to relieve suffering and to bring health and healing to men and women everywhere.

One who was a student in Doctor Osler's classes, C. D. B. Camac, formed the practice of taking shorthand notes at his lectures. A few years ago he published a book entitled *The Counsels and Ideals of Sir William Osler*. Here are some of the delightful things that he said to medical students:

"After ten years of hard work in Montreal I left the city a rich man — rich, not in this world's goods, for these things I lightly esteem — but rich in the goods which neither moth nor rust doth corrupt — rich in treasures of friendship and good fellowship, and in those treasures of widened experience and fuller knowledge of men and manners which comes from contact with the brightest minds."

In another lecture he gave this excellent advice about reading: "Let me urge you to start a bedside library and spend the last half-hour of the day in communion with the saints of humanity. There are great lessons to be learned from Job and David, from the prophet Isaiah and St. Paul. Taught by Shakespeare you may take your intellectual and moral measure."

When pressing home to students the truth

that they must deny themselves many things in order to diligently serve their fellows, he said: "Chief among the hard sayings of Jesus is the declaration, He that loveth father or mother or son or daughter more than Me is not worthy of Me. Yet this spirit is the same which, in all ages, has compelled men to follow ideals, even at the sacrifice of the near and dear ones at home. In varied tones to all, at one time or another, the call comes to serve.... It is a call to scorn delights and live the laborious days of a student. You must live for your calling. This is the essence of what Jesus said: He that findeth his life shall lose it, and he that loseth his life for My sake shall find it. Remember, the practice of medicine is not a trade or an art or a business. It is a *calling* into which you must carry both heart and head."

He was a great believer in cheerfulness, and never tired of saying that a sad man could not be a good doctor. He said: "Thank heaven if you have been given a sense of humour, the ability to appreciate droll situations. Hilarity and good humour, a breezy cheerfulness, a nature 'sloping towards the sunny side,' as Lowell has it, helps enormously in the practice and study of medicine. It is an unpardonable mistake for any doctor to go about among his patients with a long face. Whatever you do, be cheerful."

This great physician had very clear and definite ideas about the use of alcohol. This is what he said: "A healthy man does not require alcoholic stimulants of any kind. True, in some cases, a moderate use of beer or spirits does not seem to have special influence one way or the other; but the danger lies in excess, and this is not easy to define. A drinker may feel no ill effects at the time, but, if continued for years, the practice may seriously damage his constitution. To get the necessary satisfaction he must increase the daily amount, and such a man is always confronted by the terrible danger of permanent enslavement to drink. Bacchus hands in heavy bills for payment in the form of serious disease of the arteries or of the liver, or there is a general break-down."

These quotations from his lectures will suffice to show that Osler, in addition to being one of the greatest physicians in the world was also a man of noble character; he was devoutly religious and a true Christian gentleman. In 1905, at the request of King Edward VII, he accepted the position of Regius Professor of Medicine at the Oxford University in England. He entered upon his work there with the same zeal that had marked his whole career. Honours came to him from many quarters. In 1911 he was created a baronet of the United Kingdom of Great Britain, and thus became Sir William Osler.

When the Great War of 1914–1918 broke out, he was sixty-five years of age, but he did all that failing strength would permit to alleviate suffering. His only son was killed in France, and while he bore up bravely, the blow saddened his closing years. In 1919 he was stricken by pneumonia, and died after a short illness. Thus ended the earthly life of one of earth's noblest gentlemen. Several years before his death, in speaking to a group of distinguished physicians, he had used these words which so fittingly express his aim in life:

"I have made mistakes, but they have been mistakes of the head, not of the heart. I can truly say, and I take upon myself to witness that —

I have loved no darkness,
Sophisticated no truth,
Nursed no delusion,
Allowed no fear."

CHAPTER XIII

HE STRUCK THE SHACKLES FROM THE SLAVES

DURING the eighteenth century one of the most flourishing trades in the British Empire was slavery; a cruel traffic in human beings it was, which brought such enormous profits to those engaged in it that few had courage to believe it could ever be stopped. But it was, and the man who had as much, if not more, to do with its abolition than any other was William Wilberforce. In order to get an idea of what this man did, it is necessary to know a few facts about the traffic in slaves.

When America was discovered, very little was known about Africa by Europeans. But many ambitious and adventurous men struck out for the New World, and soon there were scores of European colonies scattered all the way from Carolina, through the West Indies to Brazil. These colonies seemed to possess an infinite supply of sugar, tobacco and spices. The planters, anxious to increase their production and wealth, looked anxiously around for labourers. The Red Indians of the north were not the type to give

up hunting wild animals in order to work on the plantations of the white men, nor were the people further south physically fit for such work.

What seemed a bright idea came many centuries ago from the Portuguese traders on the African coasts. In their search for gold these men had found something which brought them even greater wealth: black men and women who could be easily captured and sold for large sums as slaves. The first cargo of slaves taken to Lisbon numbered two hundred negroes, and when the planters of Brazil heard this news they said: "If these negroes can work in Portugal, they can work in Brazil."

The negroes were simple, child-like and docile; even when they were lashed with whips they seldom had spirit enough to show resentment. Used as they were to tropical heat, they seemed well suited to the needs of planters who were unable to produce sufficient crops to meet the demands of ever increasing trade. It did not take long for the planters to get in touch with reckless and unscrupulous men who were able to capture and sell the negroes in thousands and tens of thousands.

The first English trade in slaves was begun in the sixteenth century and even then it met with some opposition. But as the English colonies grew in number, and the demand for labour in

North America and the West Indies increased, objectors were overcome. King Charles II granted permission to a body of rich men in England, known as the African Company, to supply three thousand slaves a year to the West Indian colonies.

Soon there was a lively competition between English, French, Dutch and Spanish slavetraders, each bent on capturing negroes at all costs and selling them to the highest bidders. At the beginning of the eighteenth century the English alone were carrying twenty-five thousand slaves across the Atlantic each year, and before the end of the century the number had risen to sixty thousand. Other nations were almost as active.

The slaves were captured in different ways. Sometimes, on unfrequented parts of the West African coast, the traders and their men, fully armed, would swoop down upon the people who, taken completely by surprise, would be unable to offer any resistance. Every form of brutality was used by the slave traders. Defenceless negroes were torn from their wives and children and treated like dogs.

Sometimes treachery was used by the crafty slave traders. By being offered cheap and gaudy presents, unsuspecting negroes were induced to go on board the slave ships and then were seized, manacled and brutally thrown into the slaves'

quarters of the ship. No regard was paid to the wishes of the wretched negroes; family ties were ignored and children were taken from their parents, in most cases, never to see them again.

The use of intoxicating drink was one way of obtaining slaves which rarely failed. The traders approached tribal chieftains offering them gunpowder and heavy bribes of liquor if they would make war on other tribes and hand over the captives. Very seldom could the chiefs resist the offer of "fire-water".

In fact, frequently chieftains were so eager to obtain the liquor that they betrayed and sold their own subjects into slavery.

Another method used by the chiefs was to sell all prisoners to the traders. As a chief's power was absolute in his tribe, it was the easiest thing for him to accuse whomever he wished of petty offences and have them put into dungeons. For a little brandy, or some gunpowder, he would eagerly hand over these negroes to lives of degradation and slavery. It is no wonder, then, that when the season approached for the visits of the slave traders the terrified Africans huddled together in fright, knowing that each vessel would carry away a heavy ship-load of human freight.

The voyage across the ocean was a period of terror for the wretched slaves. In those far-off

days the small sailing ships had none of the comforts known in modern times. The hunting ground for slaves was from Cape Verde to the Gulf of Guinea. From there to the West Indies the voyage lay in the tropical belt. Frequently in small boats of one hundred and fifty tons, there would be from three hundred to six hundred slaves. This passage for the negroes was a perfect inferno. In his *Life of Wilberforce*, R. Coupland gives this vivid description of the voyage:

"The space between the decks was usually about five feet, and this was divided into two by a broad shelf on each side with a passageway in the middle. On the floor and on the shelves the male slaves were laid, manacled together in pairs and so packed that often they had not room to be flat on their backs. Torn from their homes, wholly unused to the sea, terrified by their present fate and the prospect of unknown sufferings to come, squeezed together like sardines, in sultry heat and rank air, fed on the coarsest food — it is not surprising that numbers of them fell ill and died.

"In fine weather they would be taken on deck for a time, and forced to dance in their chains for exercise, while the filthy quarters below were being cleaned. What the conditions must have been like in a severe Atlantic gale it is

impossible to imagine. No wonder that sometimes as many as a quarter of the slaves died on the voyage. No wonder that sometimes a wretchedly unhappy slave took advantage of a chance release from his fetters to leap into the sea."

Although news did not travel much in those days, towards the end of the eighteenth century stories of the frightful cruelty meted out to slaves were circulated in England, and indignation was increased when wealthy planters visited England, bringing their slaves with them. The sight of these miserable persons on the streets brought home to Englishmen the horrors of the slave traffic, and brought about an anti-slavery movement, with Mr. Granville Sharp as its chairman.

What was needed, however, was someone prominent in Parliament, willing to undertake the task of leading the opposition to slavery. The choice fell upon William Wilberforce, member for his native city of Hull in Yorkshire. He was just twenty-eight years of age, and on several previous occasions had shown keen interest in the movement to abolish slavery. He had entered Parliament when he was but twenty-one and in the seven intervening years his generous and sympathetic disposition, together with unusual natural gifts, had marked him as a coming man.

In many ways William Wilberforce was

handicapped for a public career. He had been an extremely delicate child and indeed throughout life he was frail and sickly. As the London *Times* said, his figure was so twisted that it resembled the letter S. When he was a boy attending the Grammar School at Hull, his health had been a constant source of anxiety. Besides this, his eye-sight was defective, so that altogether his physical appearance was unprepossessing.

But he had gifts which offset his physical deformities. He had a remarkably fine voice and possessed such enthusiasm and sympathy that those who talked with him soon forgot his misshapen body and were carried away by his magnetic personality. Once, in a stormy political meeting, he mounted a table to speak. Several others had been howled down, but he soon captured the hearers and held them spell-bound with his passionate eloquence. One who was present said: "I saw a shrimp mount the table, but as I listened, *the shrimp became a whale.*"

This was the man who now led the movement to abolish slavery throughout the British Dominions. None knew better than he did what an exceedingly difficult task he had undertaken. The slave trade had now become a profitable business; vast fortunes had been made out of it. Indeed the "West Indians," as the slave traders had become known, were among the most

influential people in England, and he would be a very courageous man who dared to face their anger and to defy them. They bitterly resented any interference with so profitable a trade.

Many of the nation's leaders were convinced that the traffic, savage and cruel as it was, was absolutely necessary, and they did not hesitate to say so. Leading newspapers, Parliamentarians, and even some distinguished churchmen, argued that to abolish a traffic that seemed so much needed, and yielded such profits, was an idle dream. But Wilberforce had made up his mind, and he told his friend William Pitt, who was Prime Minister, that he intended to devote his life to abolishing slavery throughout the British domains.

The merchants and traders who were making big profits out of the slave traffic met Wilberforce's campaign with bitter resistance. When the subject was first brought up in Parliament, they openly stated that they would not allow any interference with their business and further, that they had no intention of doing anything to lighten the scandalous treatment meted out to the negroes. This attitude provoked Pitt, the Prime Minister, and did much to arouse the people of England against the arrogant slave traders.

The friends of the slave traffic, however, were numerous, influential and wealthy. Each

time the subject was introduced into Parliament, the opposition to Wilberforce became more bitter and violent. He worked with an energy and perseverance that amazed those who knew how frail his body was. In and out of Parliament, in every part of England, Wilberforce strove to stir up opposition to the traffic.

At one time he suffered a complete collapse. Indigestion, which had troubled him for years, developed into serious intestinal trouble. His physicians thought he could not live more than a few weeks, and pronounced what was practically a death sentence. Doubtless there were many who would have rejoiced had the physicians been true prophets, but the surprising thing happened. Wilberforce recovered, and in a few months was fighting the slave traffic harder than ever.

In 1789, Wilberforce moved twelve resolutions in Parliament condemning slavery. He made a speech lasting over three hours; a speech which had in it such weight of truth and was delivered with such passion that even his enemies — and he had many of them — admitted his absolute sincerity and honesty of purpose. Wilberforce secured the assistance of such great statesmen as William Pitt, Charles Fox and Edmund Burke. Nevertheless, when the vote was taken, the abolitionists were defeated and Wilberforce was forced to recognise that the fight would last for many years.

Each year Wilberforce introduced his bill to make the slave traffic throughout the British domains illegal. In 1792 his hopes were raised high because of the extraordinary interest taken in the subject. Furthermore, he had won over some doubtful voters. The last day of the debate, January 21, found interest at fever heat. All through the night the debate lasted and the vote was not taken until after seven o'clock on the following morning. But Wilberforce was beaten by 193 votes to 125. Once again he was forced to accept defeat, but it did not diminish his determination to fight the evil traffic.

The war with France interfered with his plans, for attention was focussed on the battle-front. But at last his great day came. Early in January, 1807, Wilberforce again introduced his Abolition Bill. The debate reached a climax on February 23, 1807. Wilberforce was given an ovation such as no other man had ever received in Parliament. For twenty years he had worked for the slaves with an energy and devotion which seemed almost superhuman. He was quite overcome with the applause, and sat bent in his seat while tears streamed down his face. His triumph was complete, and when the vote was taken, the bill carried by 283 to 16. On March 25, the King gave his assent and the Bill became law.

This put an end to the slave traffic. No

more cargoes of wretched black men, women and children were taken across the Atlantic. There was to be another great day in Wilberforce's life. On July 25, 1833, the British Parliament passed a Bill abolishing all slavery in the West Indies and voting twenty million pounds compensation to the slave owners. By this generous action, eight hundred thousand slaves were set free. It was one of the greatest events in the history of the world. Wilberforce was on his deathbed when the news was carried to him. He was overcome with joy. "Thank God," he exclaimed, "that I should have lived to witness a day in which England is willing to pay twenty millions sterling for the abolition of slavery." Four days later — at three o'clock on the morning of July 29, 1833 — he passed peacefully away.

Wilberforce was buried in Westminster Abbey on August 5, 1833. Reverent hands laid him there beside his friends, Pitt, Fox, Canning and many other illustrious dead. He gave his life for the freedom of thousands of black people whom he had never seen. The world is better because he lived, and he is among those whose memory will never die.

CHAPTER XIV

A GREAT MAN WHO HAD INFINITE PATIENCE

ONE day a young student at Harvard University strolled into the museum and gazed with eager eyes at the wonderful objects of interest there, wishing that he knew more about them. An old man saw the lad's interest. So, taking specimen after specimen, he talked about them, telling their history and the changes through which they had passed. The boy was captivated; never before had he heard anything so interesting, nor had anyone taken so much trouble to explain to him the mysteries of nature. When at last the old man left him, he asked someone who he was, and found that he had been talking with Professor Louis Agassiz.

Jean Louis Rodolphe Agassiz — to give him his full name — was born at Motier, Lake Morat, in Switzerland, on May 28, 1807. His father was the village clergyman. Before his birth his mother had buried her first four children and so Louis, who was a happy little fellow, was especially dear to his parents. He made his first acquarium in a large stone basin at the back of the house.

In that basin Louis placed fishes, frogs, tadpoles, indeed every living thing he could secure from Lake Morat.

Inside the house itself he sorely tried the patience of his father and mother with his pets; rabbits, birds, field-mice, guinea pigs, all having large families and requiring as much attention as a young menagerie. Louis and his brother Auguste liked nothing better than to roam in the neighbouring woods in search of curious and unusual specimens of flowers. As for catching fish in the lake, they needed nothing but their hands, for they cornered the fish between rocks while they were bathing.

When he was ten, Louis and his brother were sent to a boys' school at Bienne where they studied for nine hours each day. When vacations came the two boys tramped the twenty miles over the mountains to their home in Motier, nor did the way seem long, for both lads were greatly interested in the beauty of the Swiss countryside. Later, Louis went to college in Lausanne and after that — when he was seventeen — he entered a medical college at Zurich.

Louis Agassiz came from a humble home where money was scarce, and during his college days he was forced to live in a very frugal way. Fortunately, one of the college professors took a great interest in him, and loaned him such books

as the lad could not afford. As in his father's home in Motier, Louis took a great interest in living things. Indeed, he afterwards said that he learned more from carefully watching their habits than he ever learned from books. In his room at college there were over forty birds with no other home than a pine-tree in a corner of the room.

After leaving Zurich, he went to study at the University of Heidelberg. He applied himself closely to his studies, but the letters he wrote to his parents at that time show that he was sorely straitened for money and was often very homesick. He formed a close friendship with a student named Alexander Braun who, like himself, was deeply interested in the subject of botany. Indeed, this student afterwards became Director of the Botanical Gardens in Berlin. Alexander Braun wrote to his parents: "Not only do my dear friend Louis and I collect and learn about all manner of things, but we have an opportunity of exchanging our views on scientific matters in general. I learn a great deal from Louis, for he is much more at home in zoology than I am. He is familiar with almost all known mammals, and can recognize birds afar off by their song. He can also give a name to every kind of fish in the water."

Louis was a keen student but he had a

passionate love of the open-air. When vacations came he frequently walked over thirty miles a day for eight or nine days in succession, finding interest and delight in everything around him. He became so absorbed in his studies, however, that in some ways he was not very practical. He had as room-mates Alexander Braun and another student named Carl Schimper. When Louis was in charge of the housekeeping, they never knew what to expect. He made the coffee in a coffee-pot which, during the day, had been used to soak all sorts of creatures for skeletons In the evening Louis used the same pot to make tea. As for the room itself, the table, couch, seats and floor, were covered with hundreds of specimens used in their studies

Although he took his physician's degree in 1830, Louis did not take to the practice of medicine, much to the disappointment of his parents He published his first book, entitled "Brazilian Fishes". This was but the forerunner of many important works which were to secure for him a place as "the first naturalist of his generation" He had earned the degree of Doctor of Philosophy when he was twenty-four, and had travelled so widely and studied so hard that he was able to write that he knew the name of every animal, living and fossil, in the museums of Munich, Stuttgart, Trubingen, Erlangen, Wurzburg, Carlsruhe and Frankfort.

He went to study in Paris in September 1831. There he spent most of his time in the Museum of Natural History. Fortunately, his tastes were very simple. He cooked his breakfast in his own room and dined for a few pence each day. He was very poor, but neither ashamed of it nor sorry for himself. At this time he wrote a letter to his brother in which he frankly stated that he had no desire to attend social functions, and furthermore, he had no decent clothes in which to appear.

In 1832, when he was twenty-five years of age, Agassiz was appointed teacher of Natural History in a school at Neuchâtel. From the beginning he was a great success. He was so well-informed, so enthusiastic, and so tremendously interested in his work, that not only students at the school but other people in the town craved the privilege of attending his lectures. With all his knowledge, he was extremely simple in his tastes, and as humble as a little child. No hearer was afraid to ask him a question, for he had infinite patience, and would talk as enthusiastically to one boy as he did to a room full of listeners.

This charming trait of Louis Agassiz was perhaps the most noticeable thing about him. He was without vanity of any kind, unfailing in his courtesy, and the friend of rich and poor alike. He won the hearts of people everywhere,

and when, later, he made his home in the United States, he was as popular in America as he had been in Europe. Children were especially attracted to him, and whenever he could gather a group of them together, he would wander with them and tell them about lakes, rivers, springs, valleys and mountains.

If the weather was not good he would gather the children indoors, get a large table, and invite them to bring specimens to the "homemade museum." Often he would tell them about the foods and fruits which grew in tropical countries. Before them he would place dates, cocoanuts, bananas, spices, or whatever he could lay his hands on. Then, after the lesson was over, his eyes would twinkle as he invited them to come forward and eat the provisions; nobody enjoyed this part of the lecture more than he did.

In 1833 Agassiz published the first volume of his great study on "Fossil Fishes." Altogether, he devoted ten years of his life, 1833–1843, to the writing of his book on this subject. The work caused him to be recognized as one of the greatest authorities on fishes, and for this the London Geological Society honoured him with a prize. Soon afterwards he paid his first visit to England, where he formed many friendships which he cherished as long as he lived.

In 1836 he began a series of remarkable

say: "Let us pray." Then in a few fervent sentences he would pray to God as a little child might turn to its mother, and every student in the room was made to feel that God, the Great Companion, was very real and near.

Agassiz made an important journey in 1865 to Brazil, where he stayed for sixteen months. This trip formed the basis of an interesting book with the title, "A journey to Brazil." In December, 1873, Agassiz complained of dimness of sight and of feeling strangely drowsy. He had already suffered a slight stroke of paralysis in 1869, and a second one, which came on December 14, 1873, resulted in his death.

He was buried at Mount Auburn Cemetery. From the glacier Aar in his beloved Switzerland was brought a boulder which was used as a monument at the head of his grave. Thus died a really great man; great because of his amazing knowledge, but great also because of his simplicity, his humility and the infinite patience with which he sought to teach others the wonder and glory of the universe.

He spoke with a foreign accent, but his amazing knowledge, combined with his sweetness of disposition, won all hearts. He generally used a blackboard when lecturing, and his ready skill as an artist added to the enjoyment of his lectures. His great work on "Fossil Fishes" had been completed in 1843, and his position as a great naturalist was assured.

Agassiz was much attracted to the American people and so, when in 1848, he was offered the position of Professor of Natural History (zoology and geology) at Harvard University, he accepted it, and made his home there. Here he became one of a brilliant group of men which included Henry W. Longfellow, Oliver Wendell Holmes, Nathaniel Hawthorne, James Russell Lowell, Charles Dana, and several others. Viewed from every standpoint, the appointment of Louis Agassiz to Harvard was as happy as it was important. He was the idol of the students, and he asked nothing more than to be able to teach. When the time came for him to make his will he signed himself "Louis Agassiz — Teacher," and that was his great ambition — to be a teacher.

Sometimes when Agassiz was speaking to students about the marvels of nature, staggering in their vastness and infinite in their variety, he would stop suddenly as if lost for words, and

studies of glaciers. A few years later, he established a permanent station for observation on the Alps, taking with him barometers, boring-apparatus, microscopes and all the equipment needed for close study. He and the guides he secured made many dangerous ascents over the snow-covered Alps, measuring the depths and movements of glaciers. He made many important discoveries and added greatly to man's knowledge of this little-known subject.

On one occasion he allowed himself to be lowered to a depth of one hundred and twenty-five feet that he might study the walls of a glacier. A strong tripod was built above, and Agassiz, seated firmly on a board attached by ropes, was slowly let down into the dangerous depths. He was thrilled, watching the blue bands in the glittering walls, but suddenly his feet were plunged into ice-cold water. He gave the signal for his friends to draw him up, but ascent was much more difficult. Innumerable icicles, like so many threatening spear points, looked down upon him. Any one of these dagger-like points might cut the rope and send him crashing to the bottom. It was with a tremendous sigh of relief that the naturalist reached the surface again.

In 1846 Louis Agassiz visited America and delivered twelve lectures in Boston on "Plan of the Creation, especially in the Animal Kingdom."

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